MOTIFSIM - MOTIF SIMilarity Detection Tool

Version 2.2

INPUT

Input Parameters

Number of files:	1
Number of top significant motifs:	10
Number of best matches:	5
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
CisFinder_DM721_Cluster.txt	153	1

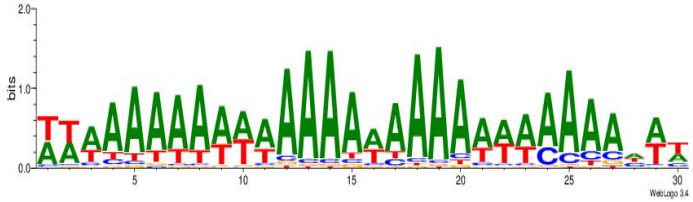
RESULTS

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

Dataset #: 1 **Motif ID: 1** **Motif name: C001**

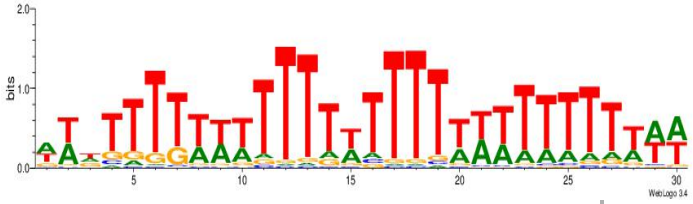
Original motif

Consensus sequence: WWWAAAAAWWAAAAAWAAAAAWWAAAAHWW



Reverse complement motif

Consensus sequence: WWHTTTTWWTTTTTWTTTTTWWT



Best Matches for Motif ID 1 (Highest to Lowest)

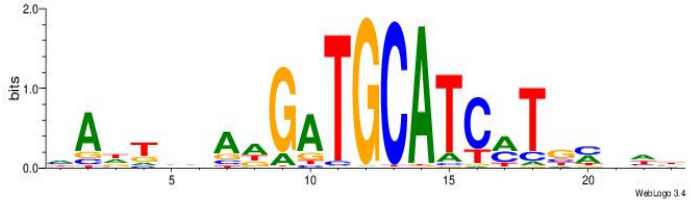
Motif ID:	UP00528
Motif name:	Foxm1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	23
Similarity score:	0.0846473

Alignment:

```
-------HADTBVADGATGCATCMTGMVHB
WWWAAAAAWWAAAAAWAAAAAWWAAAAHWW--
```

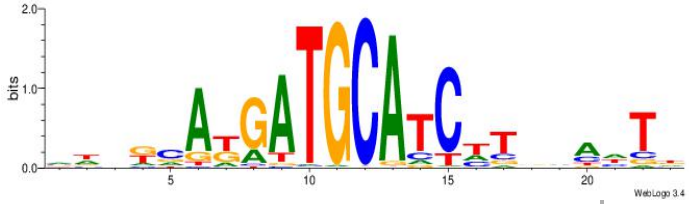
Original motif

Consensus sequence: HADTBVADGATGCATCMTGMVHB



Reverse complement motif

Consensus sequence: VHVRCAYGATGCATCDTVVADTH



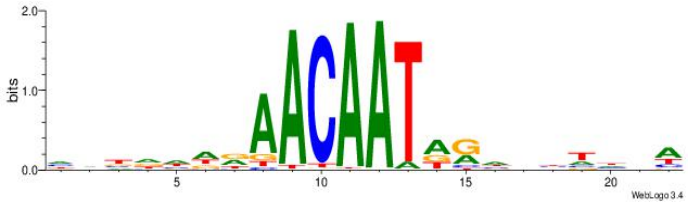
Motif ID:	UP00034
Motif name:	Sox7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	22
Similarity score:	0.561689

Alignment:

```
--------HHBDHDDAACAATDRHHHHHBW
WWWAAAAAWWAAAAAWAAAAAWWAAAAHWW-
```

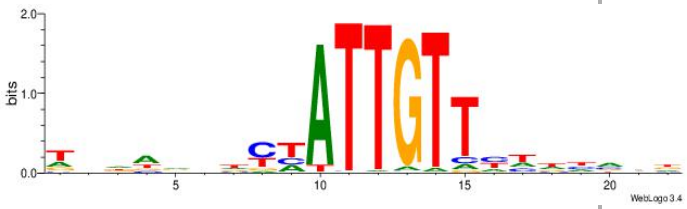
Original motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW



Reverse complement motif

Consensus sequence: WBHHHHHMDATTGTTHDHDVHH



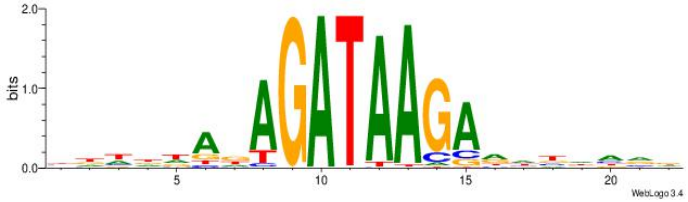
Motif ID:	UP00032
Motif name:	Gata3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	22
Similarity score:	0.566383

Alignment:

```
--------HBHDVHDTCTTATCTHTDDHDV
WWHTTTTWWTTTTTWTTTTTWWTTTTTWWW-----
```

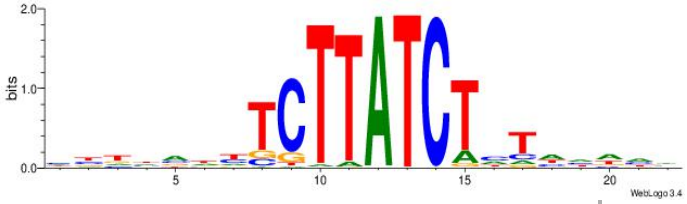
Original motif

Consensus sequence: BDHDDADAGATAAGADHBDHVD



Reverse complement motif

Consensus sequence: HBHDVHDTCTTATCTHTDDHDV



Motif ID:	UP00032
Motif name:	Gata3_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:	22
Similarity score:	0.575767

Alignment:

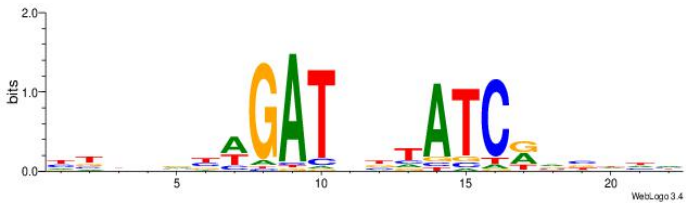
```
HBHDVBWGATHBTATCRVBHHH--------
------WWWAAAAAWWAAAAAWAAAAAWWAAAAHWW
```

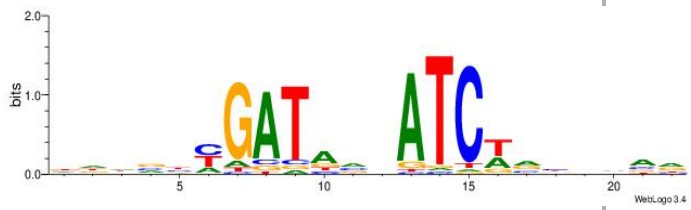
Original motif

Consensus sequence: HBHDVBWGATHBTATCRVBHHH

Reverse complement motif

Consensus sequence: HHHBBMGATAVHATCWVVDHVH





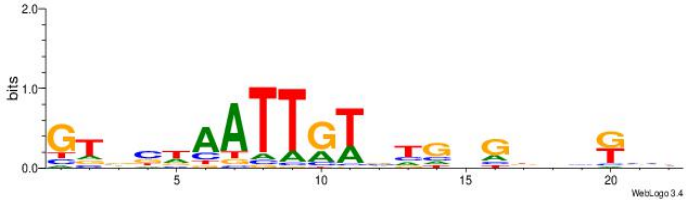
Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	22
Similarity score:	0.578275

Alignment:

```
--------VVYDDDCHCAVACAATTDBVAC
WWHTTTTWWTTTTTWTTTTTWWTTTTTWWW-----
```

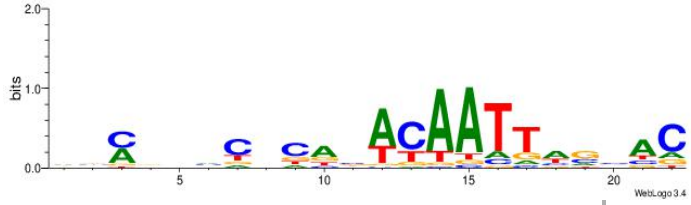
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif

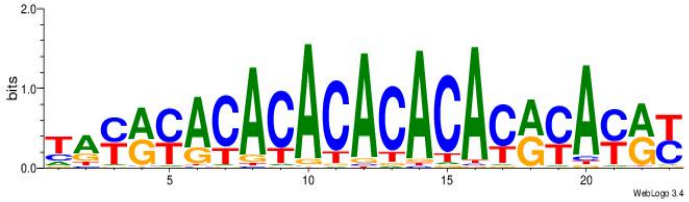
Consensus sequence: VVYDDDCHCAVACAATTDBVAC



Dataset #: 1 Motif ID: 2 Motif name: C002

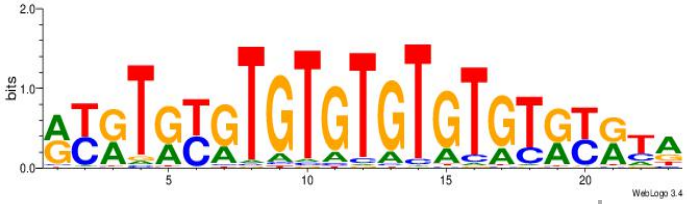
Original motif

Consensus sequence: TAYRYACACACACACACRYAYRY



Reverse complement motif

Consensus sequence: MKKTKKGTGTGTGTGTGTKKKTA



Best Matches for Motif ID 2 (Highest to Lowest)

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:	23
Similarity score:	0.0589959

Alignment:

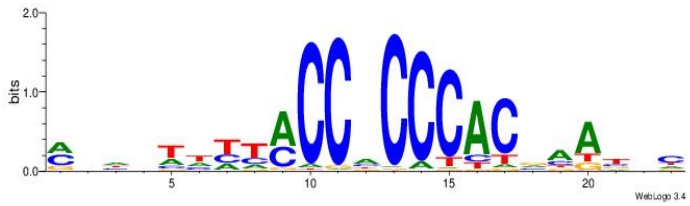
```
MHHHWHYTMCCHCCCACVAABVH
TAYRYACACACACACACRYAYRY
```

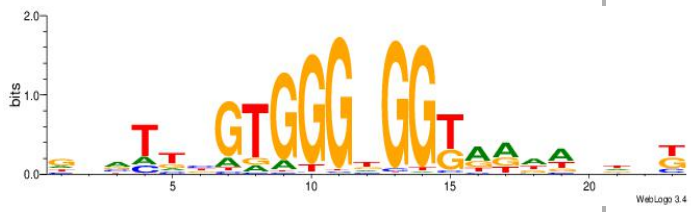
Original motif

Consensus sequence: MHHHWHYTMCCHCCCACVAABVH

Reverse complement motif

Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY





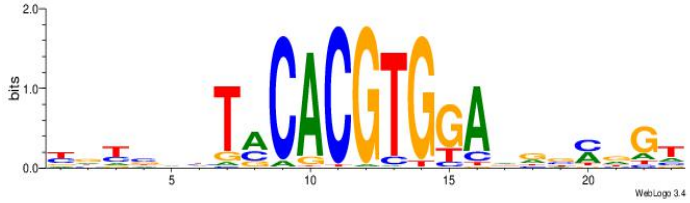
Motif ID:	UP00050
Motif name:	Bhlhb2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	23
Similarity score:	0.0678722

Alignment:

```
YDYBDHTMCACGTGGADDBMDGT
TAYRYACACACACACACRYAYRY
```

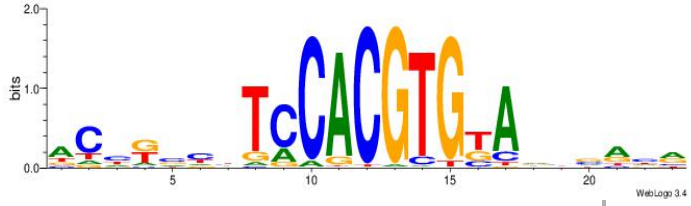
Original motif

Consensus sequence: YDYBDHTMCACGTGGADDBMDGT



Reverse complement motif

Consensus sequence: ACHRBHDTCCACGTGYAHHBMHM



Motif ID:	UP00538

Motif name:	Gli1_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	23
Similarity score:	0.0739216

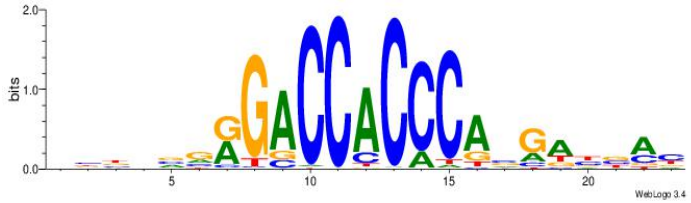
Alignment:

BBBDVVRGACCACCCAVGABBAB

TAYRYACACACACACACRYAYRY

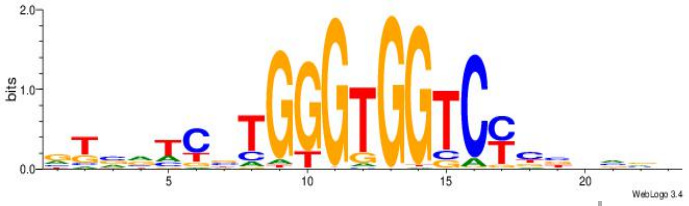
Original motif

Consensus sequence: BBBDVVRGACCACCCAVGABBAB



Reverse complement motif

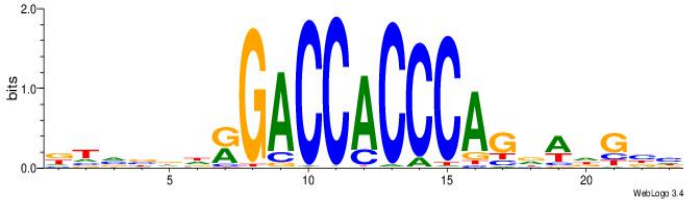
Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB



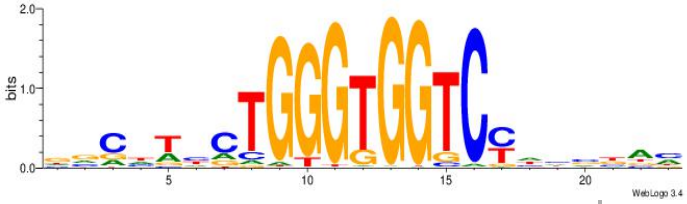
Motif ID:	UP00539
Motif name:	Gli2_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	23
Similarity score:	0.077586

Alignment:
DTVBDDRGACCACCCAGDWDGBH
TAYRYACACACACACACRYAYRY

Original motif
Consensus sequence: DTVBDDRGACCACCCAGDWDGBH



Reverse complement motif
Consensus sequence: DBCDWHCTGGGTGGTCMDHBBAH

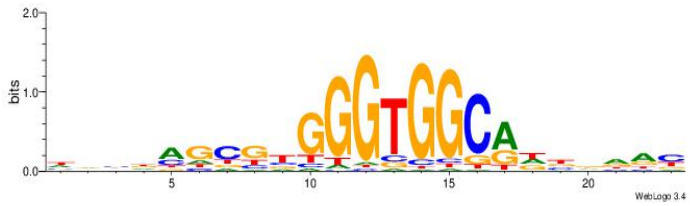


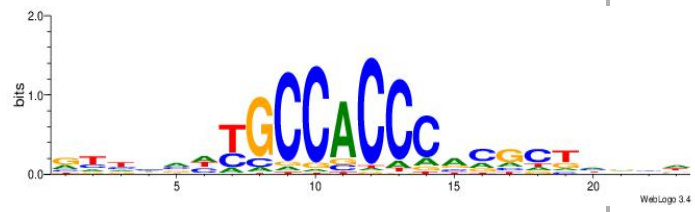
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	22
Similarity score:	0.55938

Alignment:
-HVBDAGCGBGGGTGGCRDBDDDB
MKKTKKGTGTGTGTGTGTKKKTA-

Original motif
Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB

Reverse complement motif
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH

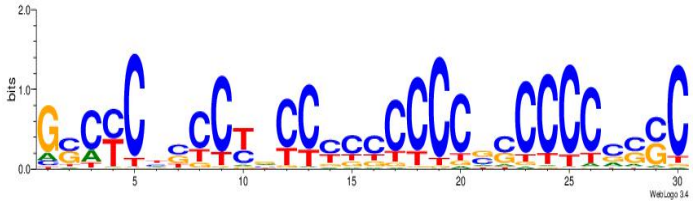




Dataset #: 1 **Motif ID: 3** **Motif name: C003**

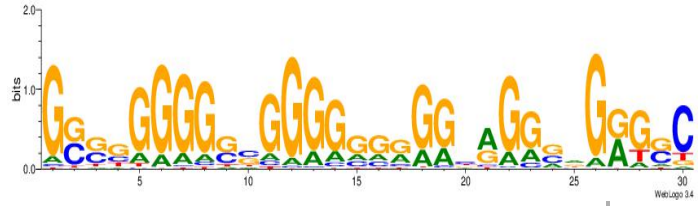
Original motif

Consensus sequence: GSCYCHSCCYVCCYCCCCCCSSCCCCCSSC



Reverse complement motif

Consensus sequence: GSSGGGGGSSGGGGGKGGVMG



Best Matches for Motif ID 3 (Highest to Lowest)

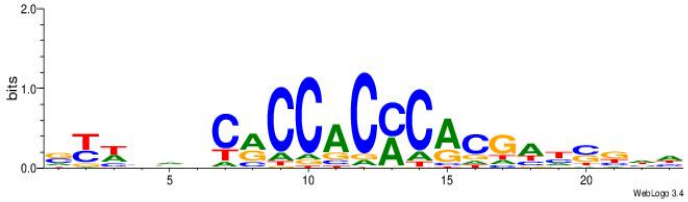
Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	7
Number of overlap:	23
Similarity score:	0.0504417

Alignment:

```
VYWVVHCRCCACMCACGAHSBHH-------
------GSCYCHSCCYVCCYCCCCCCSSCCCCCSSC
```

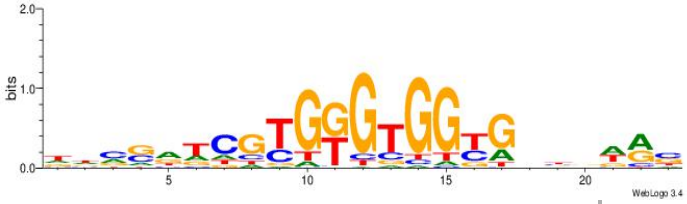
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



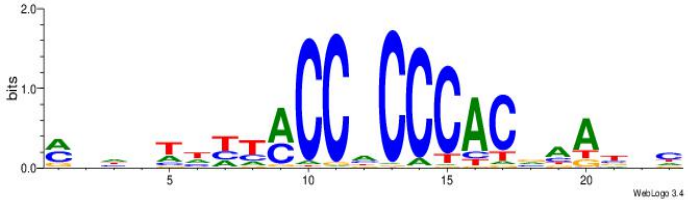
Motif ID:	UP00538
Motif name:	Gli1_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	23
Similarity score:	0.0508168

Alignment:

```
MHHHWHYTMCCHCCCACVAABVH-------
-----GSCYCHSCCYVCCYCCCCCCSSCCCCCSSC
```

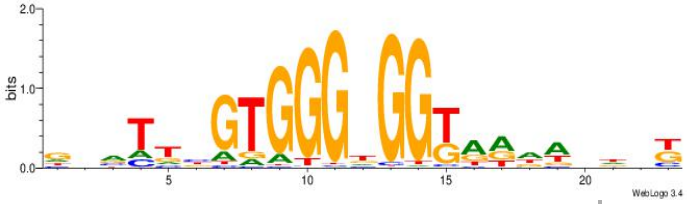
Original motif

Consensus sequence: MHHHWHYTMCCHCCCACVAABVH



Reverse complement motif

Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY



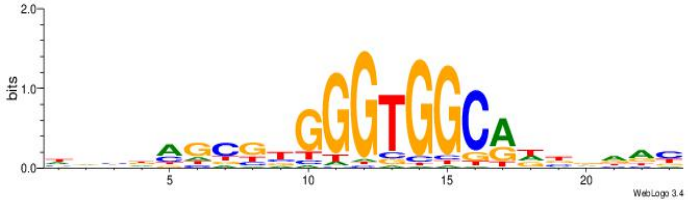
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	23
Similarity score:	0.0518257

Alignment:

```
BDDHVDKGCCACCCVCGCTDBVH-------
-GSSGGGGGSSGGGGGGKGGVMGGSHGKGSC
```

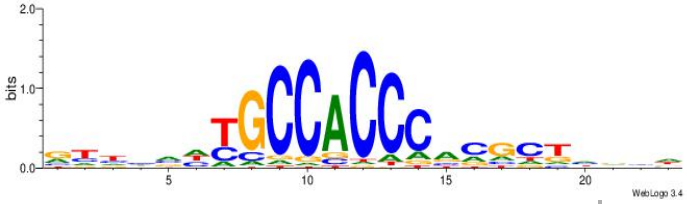
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	23

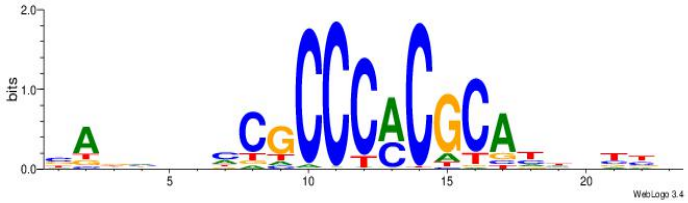
Similarity score: 0.05306

Alignment:

```
-------BADHBDHCGCCCMCGCAHHDBBV
GSCYCHSCCYVCCYCCCCCCSSCCCCCSSC
```

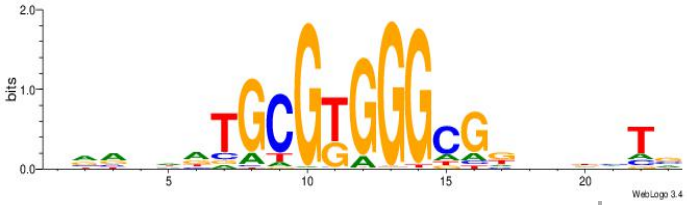
Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif

Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB



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:	6
Number of overlap:	23
Similarity score:	0.0591633

Alignment:

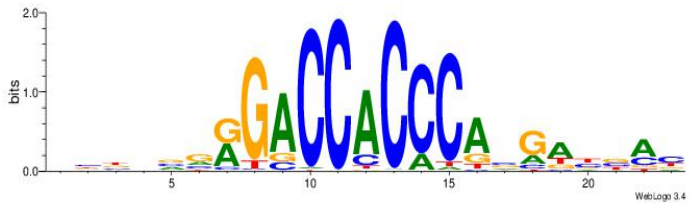
```
-------BTBVTCVTGGGTGGTCMVVDVBB
GSSGGGGGSSGGGGGGKGGVMGGSHGKGSC-----
```

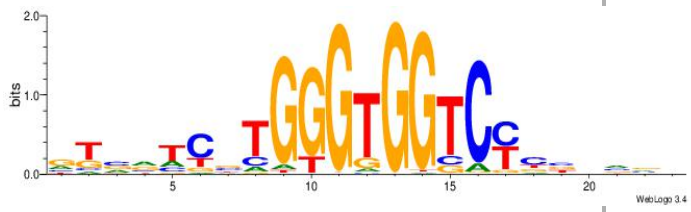
Original motif

Consensus sequence: BBBDVVRGACCACCCAVGABBAB

Reverse complement motif

Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB

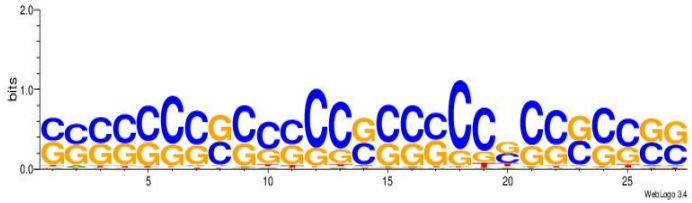




Dataset #: 1 **Motif ID: 4** **Motif name: C004**

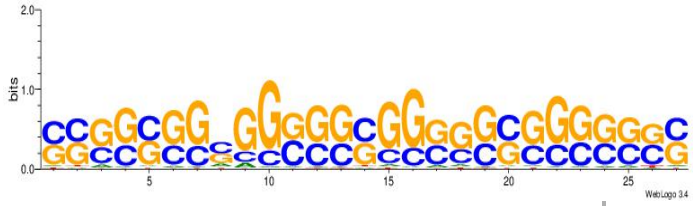
Original motif

Consensus sequence: SSSSSCSSSSSCCSSSSCCSCSSSSSS



Reverse complement motif

Consensus sequence: SSSSSSGSGGSSSSGGSSSSSGSS



Best Matches for Motif ID 4 (Highest to Lowest)

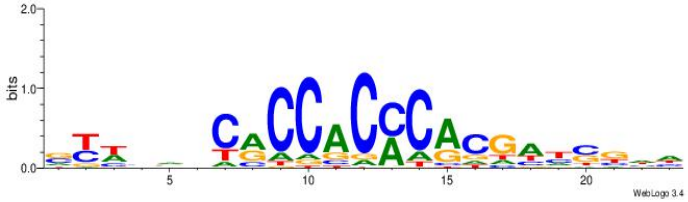
Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	23
Similarity score:	0.0378869

Alignment:

```
HHBSHTCGTGRGTGGKGDBVWMV----
-SSSSSSGSGGSSSSGGSSSSSGSSSSS
```

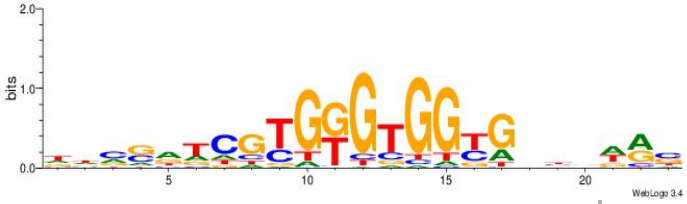
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



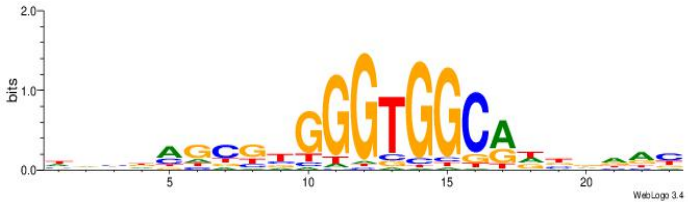
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	23
Similarity score:	0.042097

Alignment:

```
----HVBDAGCGBGGGTGGCRDBDDDB
SSSSSCSSSSSCCSSSSCCSCSSSSSS----
```

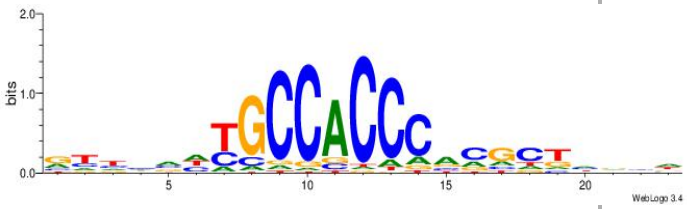
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



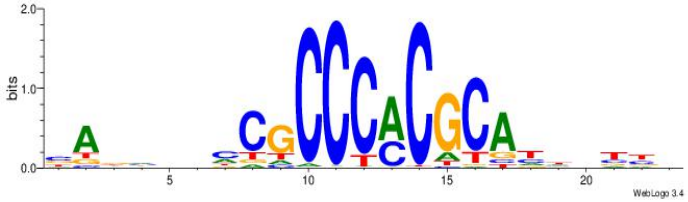
Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	23
Similarity score:	0.042858

Alignment:

```
VVVDHHTGCGYGGGCGDHVHHTB----
--SSSSSSGSGGSSSSGGSSSSSGSSSSS
```

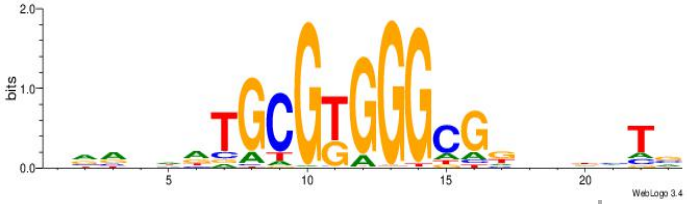
Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif

Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB



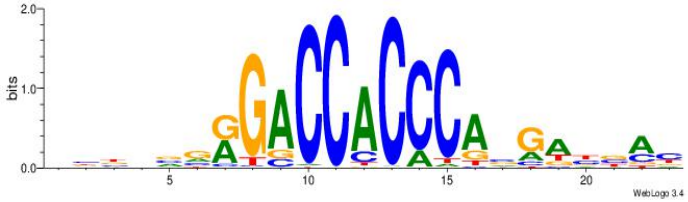
Motif ID:	UP00538
Motif name:	Gli1_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	23
Similarity score:	0.0467324

Alignment:

```
----BTBVTCVTGGGTGGTCMVVDVBB
SSSSSSGSGGSSSSGGSSSSSGSSSSS--
```

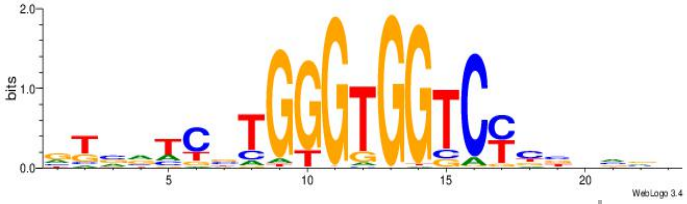
Original motif

Consensus sequence: BBBDVVRGACCACCCAVGABBAB



Reverse complement motif

Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB



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:	4
Number of overlap:	23
Similarity score:	0.0486423

Alignment:

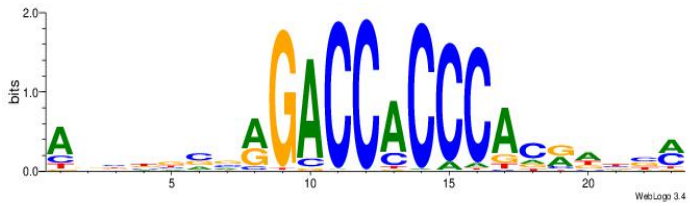
```
----ABBBBVVRGACCACCCACRDBBM
SSSSSCSSSSSCCSSSSCCSCSSSSSS---
```

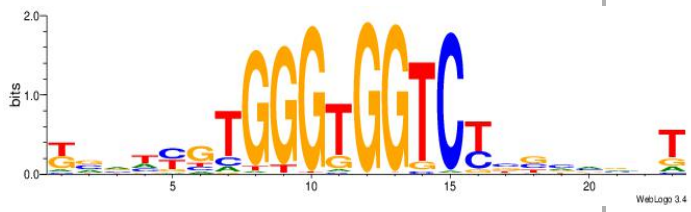
Original motif

Consensus sequence: ABBBBVVRGACCACCCACRDBBM

Reverse complement motif

Consensus sequence: YBVDMGTGGGTGGTCKVVBVBBT

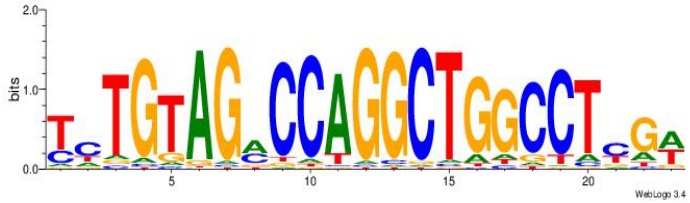




Dataset #: 1 **Motif ID: 5** **Motif name: C005**

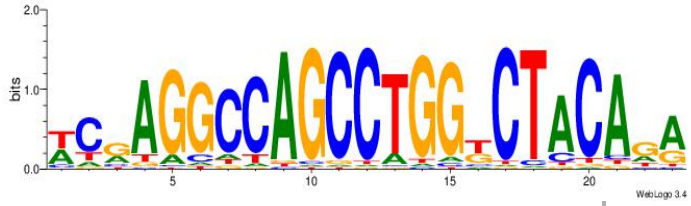
Original motif

Consensus sequence: TCTGTAGMCCAGGCTGGCCTYGW



Reverse complement motif

Consensus sequence: WCKAGGCCAGCCTGGYCTACAGA



Best Matches for Motif ID 5 (Highest to Lowest)

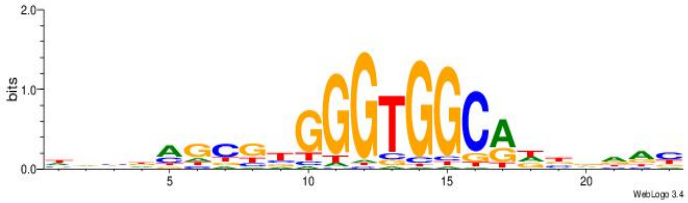
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	23
Similarity score:	0.0620662

Alignment:

BDDHVDKGCCACCCVCGCTDBVH
TCTGTAGMCCAGGCTGGCCTYGW

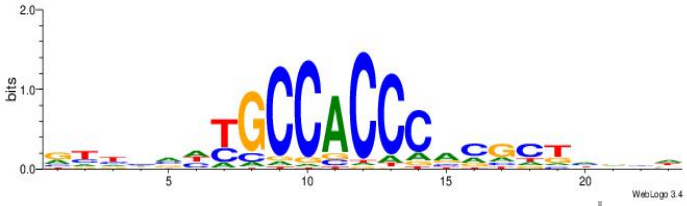
Original motif

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:	22
Similarity score:	0.553936

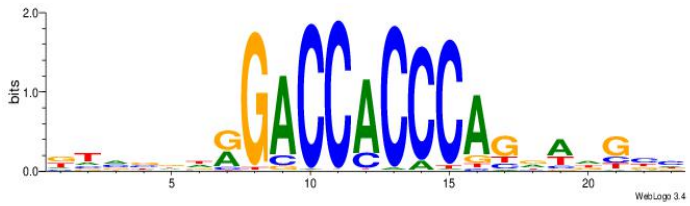
Alignment:
-DTVBDDRGACCACCCAGDWDGBH
TCTGTAGMCCAGGCTGGCCTYGW-

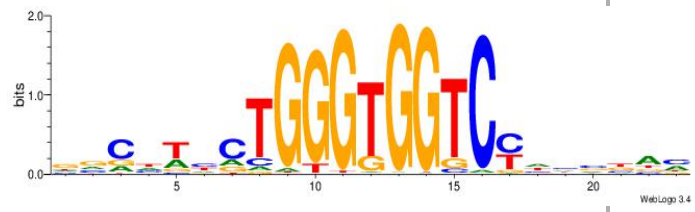
Original motif

Consensus sequence: DTVBDDRGACCACCCAGDWDGBH

Reverse complement motif

Consensus sequence: DBCDWHCTGGGTGGTCMDHBBAH





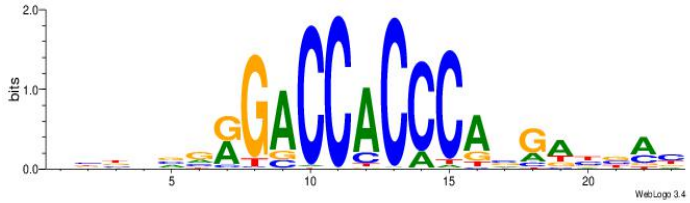
Motif ID:	UP00538
Motif name:	Gli1_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	22
Similarity score:	0.556669

Alignment:

```
-BBBDVVRGACCACCCAVGABBAB
TCTGTAGMCCAGGCTGGCCTYGW-
```

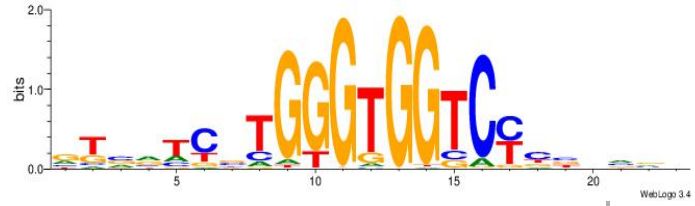
Original motif

Consensus sequence: BBBDVVRGACCACCCAVGABBAB



Reverse complement motif

Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB



Motif ID:	UP00538
Motif name:	Gli1_v016060_primary

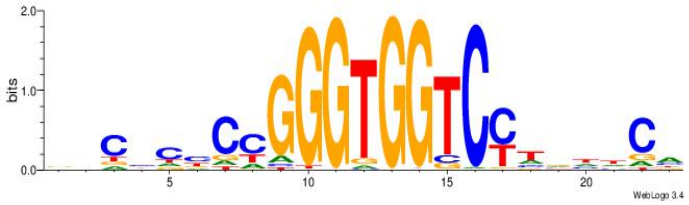
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	22
Similarity score:	0.55849

Alignment:

HGDHVHKGACCACCCGGBGBGDB-
-WCKAGGCCAGCCTGGYCTACAGA

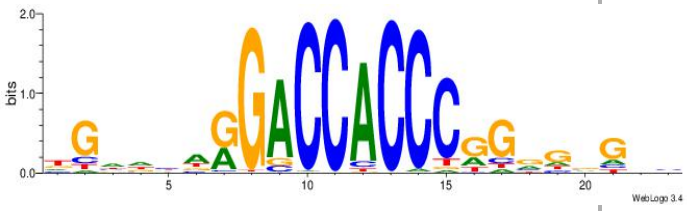
Original motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif

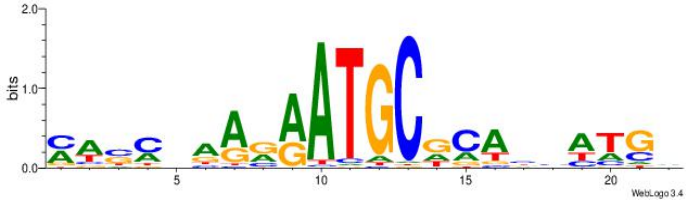
Consensus sequence: HGDHVHKGACCACCCGGBGBGDB



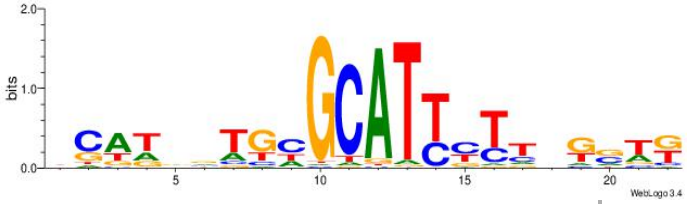
Motif ID:	UP00528
Motif name:	Foxm1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	22
Similarity score:	0.56544

Alignment:
DCATDBTGHGCATKMTTBRSWR-
WCKAGGCCAGCCTGGYCTACAGA

Original motif
Consensus sequence: MWSMBAARRATGCDCABHATGD

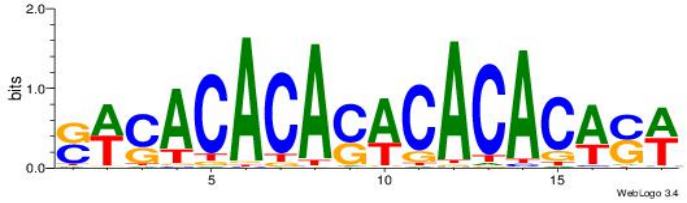


Reverse complement motif
Consensus sequence: DCATDBTGHGCATKMTTBRSWR

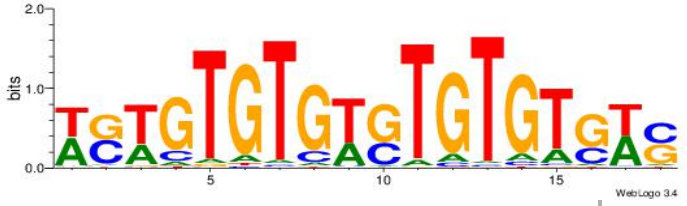


Dataset #: 1 Motif ID: 6 Motif name: C006

Original motif
Consensus sequence: SWCACACASWCACACWSW



Reverse complement motif
Consensus sequence: WSWGTGTGWSTGTGTGWS



Best Matches for Motif ID 6 (Highest to Lowest)

Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement

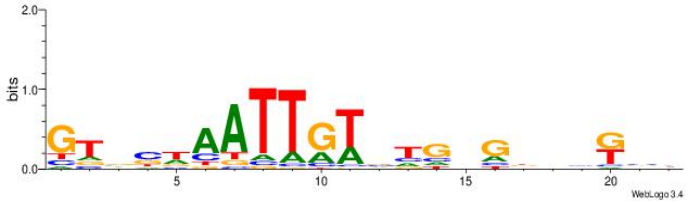
Direction:	Backward
Position number:	3
Number of overlap:	18
Similarity score:	0.0361661

Alignment:

```
VVYDDDCHCAVACAATTDBVAC
--SWCACACASWCACACWSW--
```

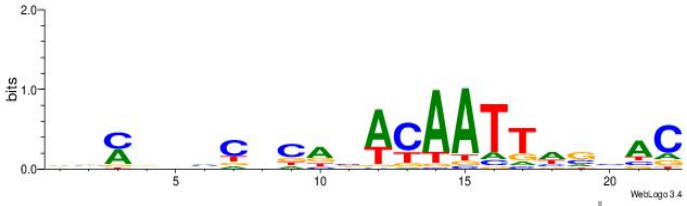
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif

Consensus sequence: VVYDDDCHCAVACAATTDBVAC



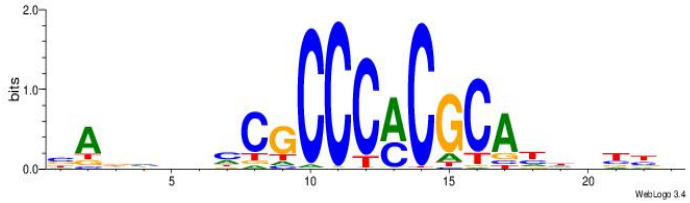
Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	18
Similarity score:	0.0406554

Alignment:

BADHBDHCGCCCMCGCAHHDBBV
---SWCACACASWCACACWSW--

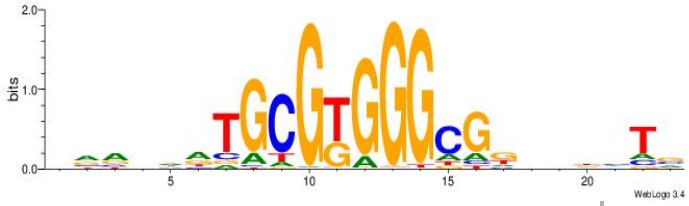
Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif

Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB



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:	5
Number of overlap:	18
Similarity score:	0.040868

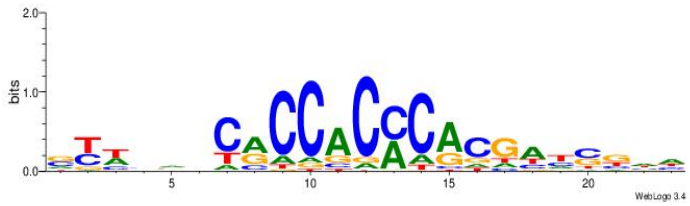
Alignment:
VYWVVHCRCCACMCACGAHSBHH
-SWCACACASWCACACWSW----

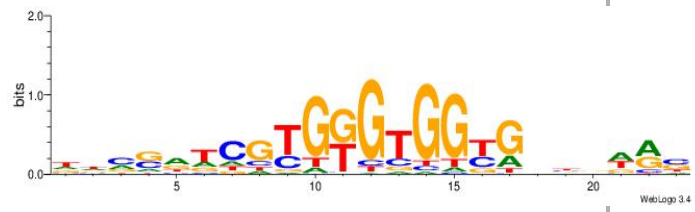
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH

Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV





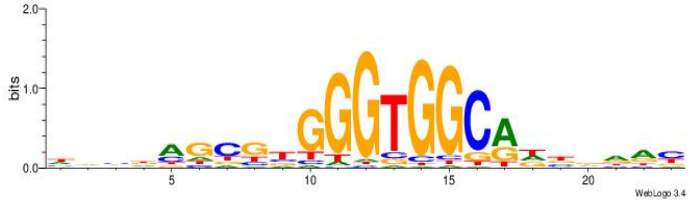
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	18
Similarity score:	0.0421858

Alignment:

```
HVBDAGCGBGGGTGGCRDBDDDB
WSWGTGTGWSTGTGTGWS-----
```

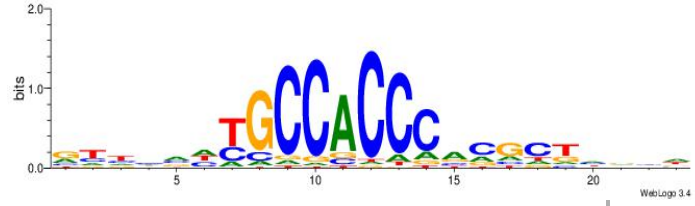
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



Motif ID:	UP00098

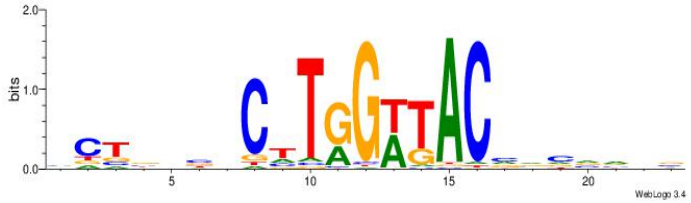
Motif name:	Rfx3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	18
Similarity score:	0.0427432

Alignment:

```
VCTBHBVCTTGGWTACVVVVVDB
---SWCACACASWCACACWSW--
```

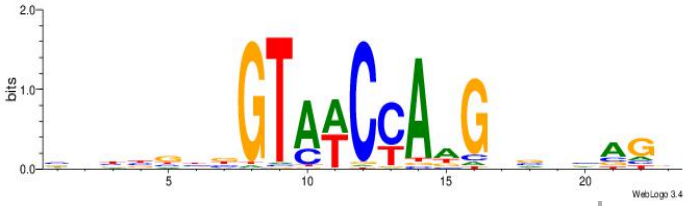
Original motif

Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB



Reverse complement motif

Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB



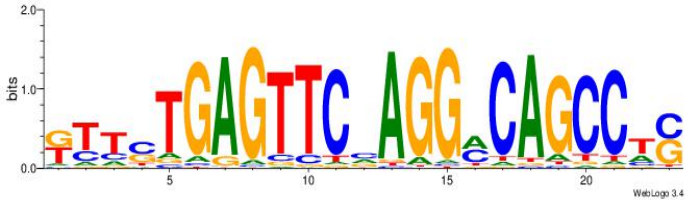
Dataset #: 1 **Motif ID: 7** **Motif name: C007**

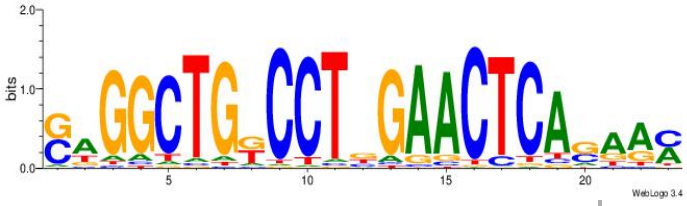
Original motif

Consensus sequence: KTTSTGAGTTCVAGGMCAGCCTS

Reverse complement motif

Consensus sequence: SAGGCTGYCCTVGAACTCASAAY





Best Matches for Motif ID 7 (Highest to Lowest)

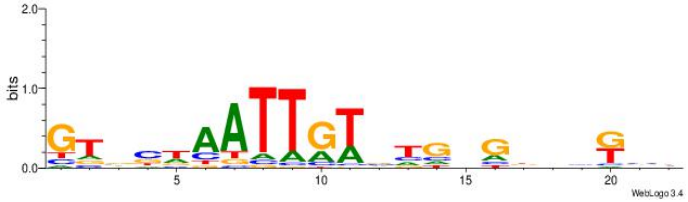
Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	22
Similarity score:	0.0642913

Alignment:

```
VVYDDDCHCAVACAATTDBVAC-
-SAGGCTGYCCTVGAACTCASAAY
```

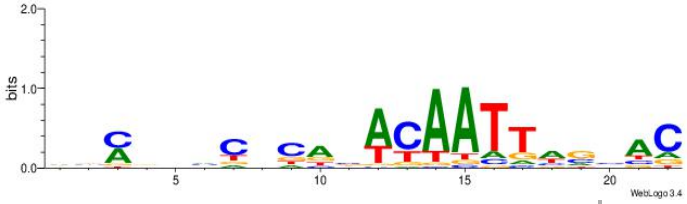
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif

Consensus sequence: VVYDDDCHCAVACAATTDBVAC



Motif ID: UP00098

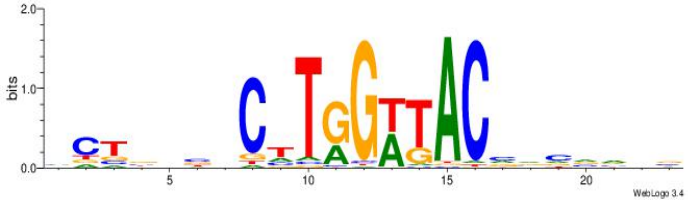
Motif name:	Rfx3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	22
Similarity score:	0.0664801

Alignment:

```
-VCTBHBVCTTGGWTACVVVVVDB
KTTSTGAGTTCVAGGMCAGCCTS-
```

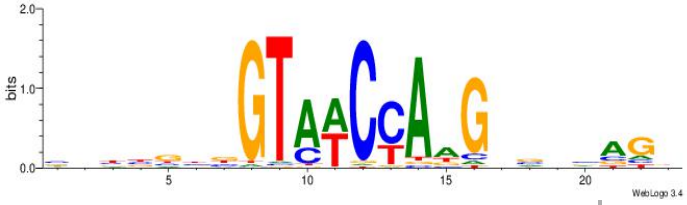
Original motif

Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB



Reverse complement motif

Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB



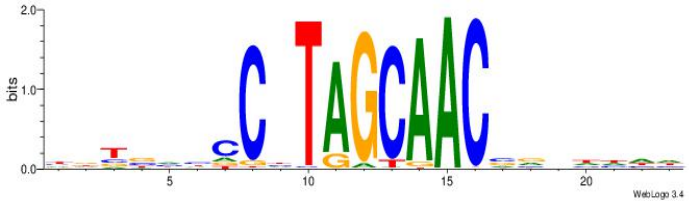
Motif ID:	UP00098
Motif name:	Rfx3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	22
Similarity score:	0.0672967

Alignment:

HHHHDVVGTTGCTAHGGDHBAHH-
-SAGGCTGYCCTVGAACTCASAAY

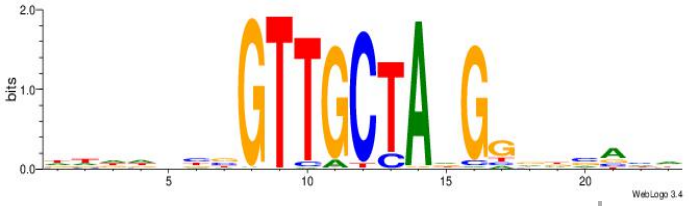
Original motif

Consensus sequence: HDTBHHCCHTAGCAACVVDHHHH



Reverse complement motif

Consensus sequence: HHHHDVVGTTGCTAHGGDHBAHH



Motif ID:	UP00538
Motif name:	Gli1_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	22
Similarity score:	0.0707277

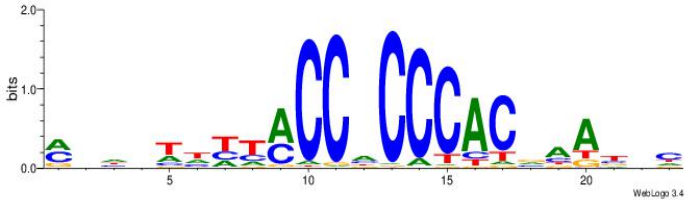
Alignment:
-DVVTTVGTGGGHGGYAMHWHHHY
KTTSTGAGTTCVAGGMCAGCCTS-

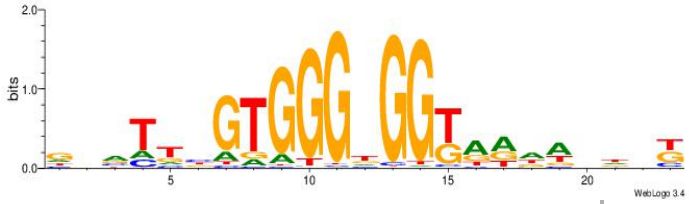
Original motif

Consensus sequence: MHHHWHYTMCCHCCCACVAABVH

Reverse complement motif

Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY

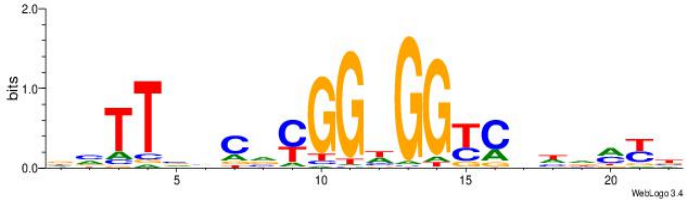




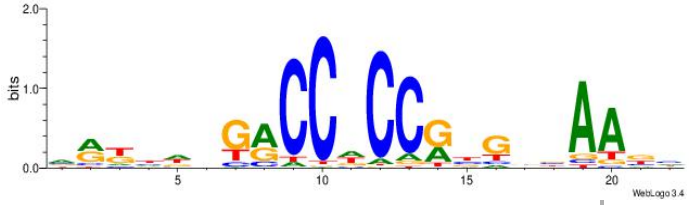
Motif ID: UP00540
Motif name: Gli3_v015681_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 3
Number of overlap: 21
Similarity score: 0.562337

Alignment:
VMYDHDGMCCHCCKBGVVAAVH--
--SAGGCTGYCCTVGAACTCASAAY

Original motif
Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



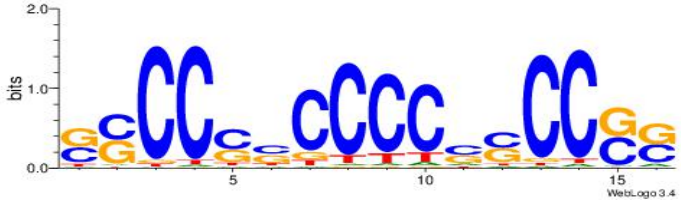
Reverse complement motif
Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH



Dataset #: 1 **Motif ID: 8** **Motif name: C008**

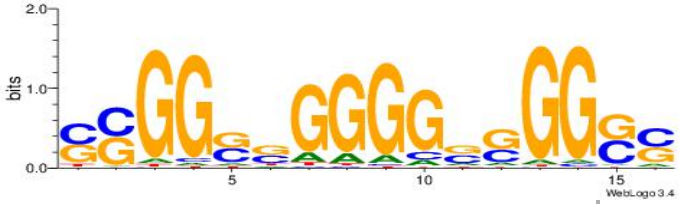
Original motif

Consensus sequence: SSCCSSCCCCSSCCSS



Reverse complement motif

Consensus sequence: SSGGSSGGGGSSGGSS



Best Matches for Motif ID 8 (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:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	16
Similarity score:	0.0353177

Alignment:

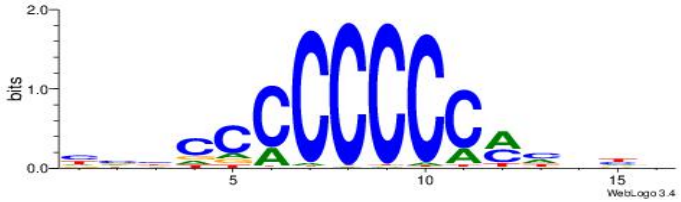
```
HVBCCCCCCCCMHHHB
SSCCSSCCCCSSCCSS
```

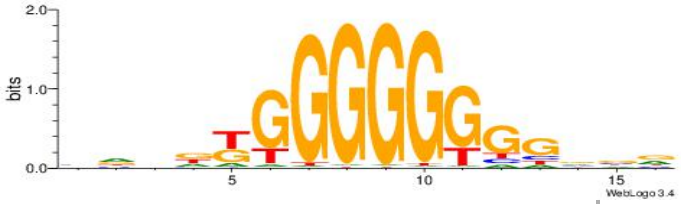
Original motif

Consensus sequence: HVBCCCCCCCCMHHHB

Reverse complement motif

Consensus sequence: BHHDYGGGGGGGGBVD





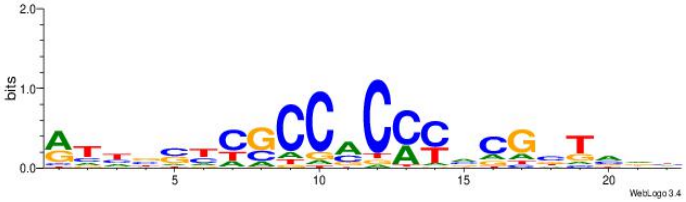
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	16
Similarity score:	0.0353208

Alignment:

```
RTHBSYCGCCMCMYVCGBTVDH
--SSCCSSCCCCSSCCSS----
```

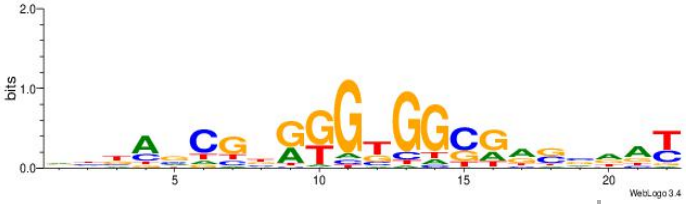
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



Motif ID:	UP00540

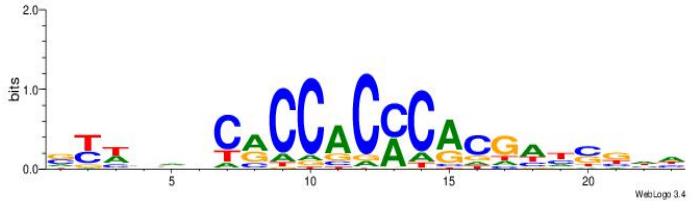
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	8
Number of overlap:	16
Similarity score:	0.0416492

Alignment:

```
HHBSHTCGTGRGTGGKGDBVWMV
-------SSGGSSGGGGSSGGSS
```

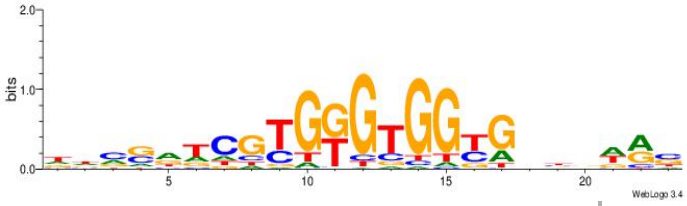
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV

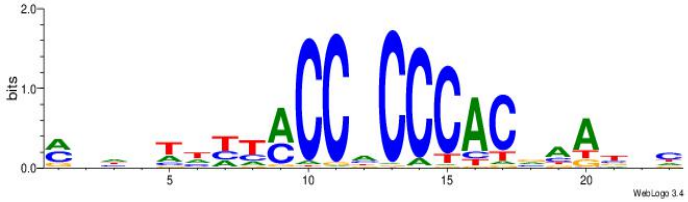


Motif ID:	UP00538
Motif name:	Gli1_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	8
Number of overlap:	16

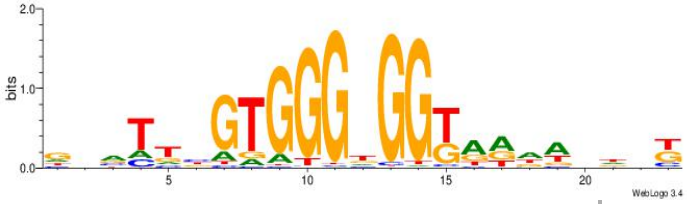
Similarity score: 0.0427346

Alignment:
DVVTTVGTGGGHGGYAMHWHHHY
SSGGSSGGGGSSGGSS-------

Original motif
Consensus sequence: MHHHWHYTMCCHCCCACVAABVH



Reverse complement motif
Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY

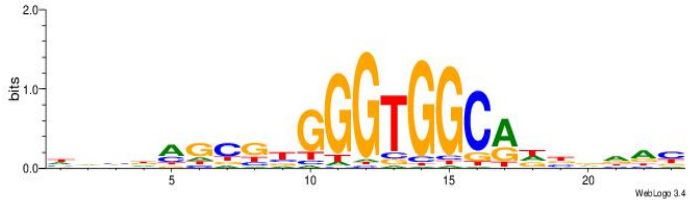


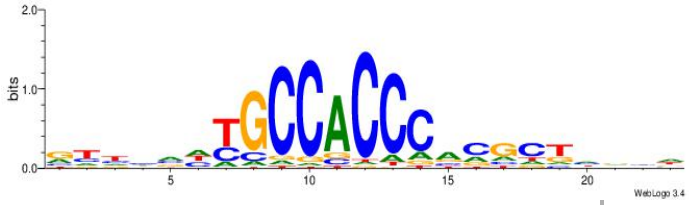
Motif ID: UP00538
Motif name: Gli1_v016060_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 2
Number of overlap: 16
Similarity score: 0.0428588

Alignment:
HVBDAGCGBGGGTGGCRDBDDDB
-SSGGSSGGGGSSGGSS------

Original motif
Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB

Reverse complement motif
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH

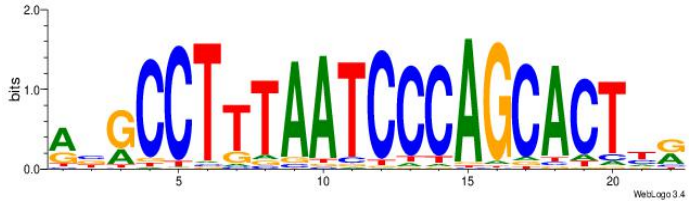




Dataset #: 1 **Motif ID: 9** **Motif name: C009**

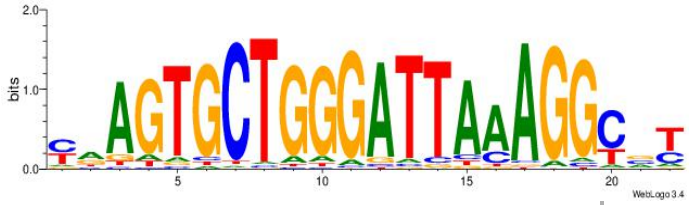
Original motif

Consensus sequence: ABGCCTTTAATCCCAGCACTHR



Reverse complement motif

Consensus sequence: MHAGTGCTGGGATTAAAGGCBT



Best Matches for Motif ID 9 (Highest to Lowest)

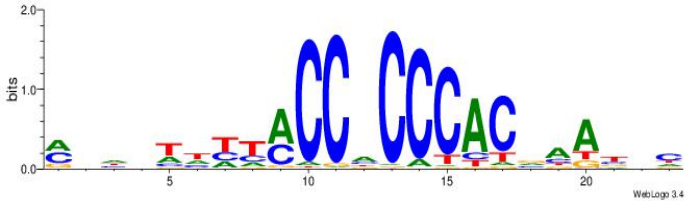
Motif ID:	UP00538
Motif name:	Gli1_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	22
Similarity score:	0.0664875

Alignment:

DVVTTVGTGGGHGGYAMHWHHHY
MHAGTGCTGGGATTAAAGGCBT-

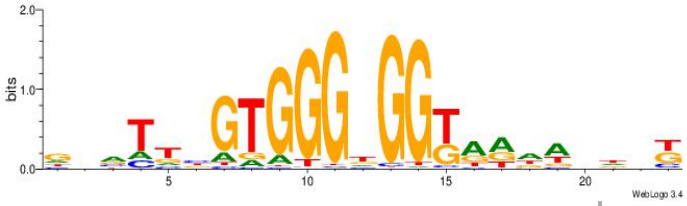
Original motif

Consensus sequence: MHHHWHYTMCCHCCCACVAABVH



Reverse complement motif

Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY



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:	Forward
Position number:	2
Number of overlap:	21
Similarity score:	0.56321

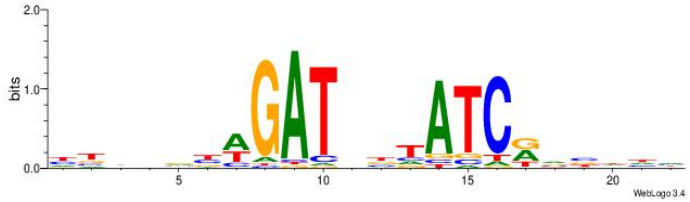
Alignment:
HBHDVBWGATHBTATCRVBHHH-
-ABGCCTTTAATCCCAGCACTHR

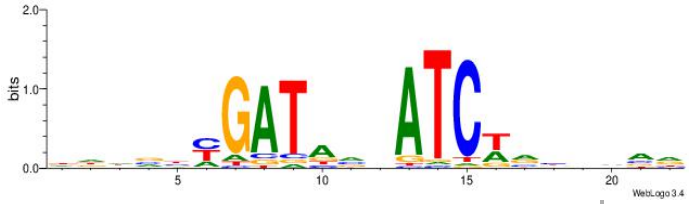
Original motif

Consensus sequence: HBHDVBWGATHBTATCRVBHHH

Reverse complement motif

Consensus sequence: HHHBBMGATAVHATCWVVDHVH





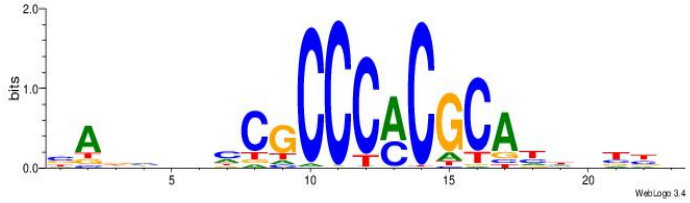
Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	21
Similarity score:	0.565627

Alignment:

```
-BADHBDHCGCCCMCGCAHHDBBV
ABGCCTTTAATCCCAGCACTHR--
```

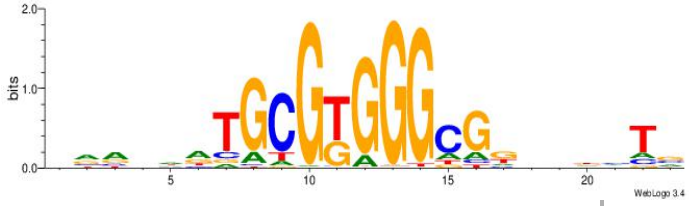
Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif

Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB



Motif ID:	UP00539

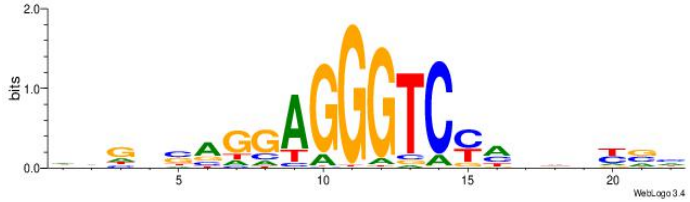
Motif name:	Gli2_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	21
Similarity score:	0.56702

Alignment:

```
HVGVSAGGAGGGTCYHHHHYVH-
-ABGCCTTTAATCCCAGCACTHR
```

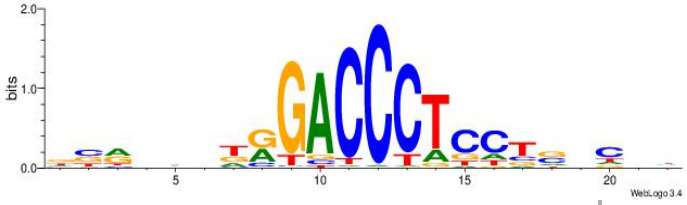
Original motif

Consensus sequence: HVGVSAGGAGGGTCYHHHHYVH



Reverse complement motif

Consensus sequence: DVMHHDHKGACCCTCCTSVCBH



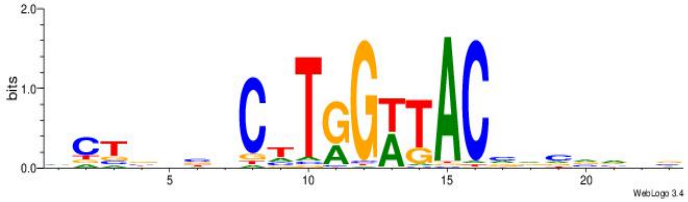
Motif ID:	UP00098
Motif name:	Rfx3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	20
Similarity score:	1.06431

Alignment:

```
--BDBBVBVGTAWCCAAGVBHBAGB
MHAGTGCTGGGATTAAAGGCBT---
```

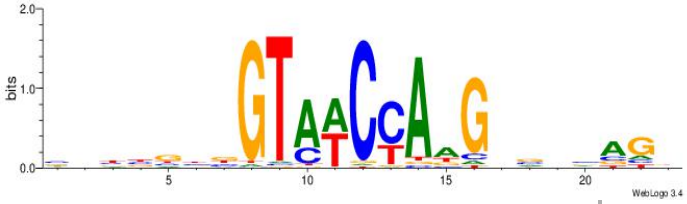
Original motif

Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB



Reverse complement motif

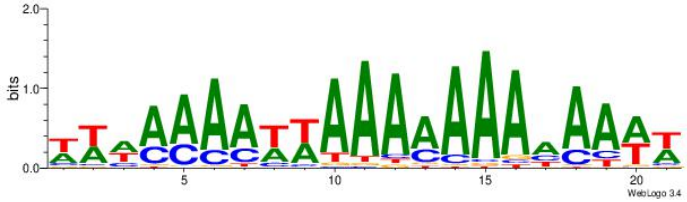
Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB



Dataset #: 1 Motif ID: 10 Motif name: C010

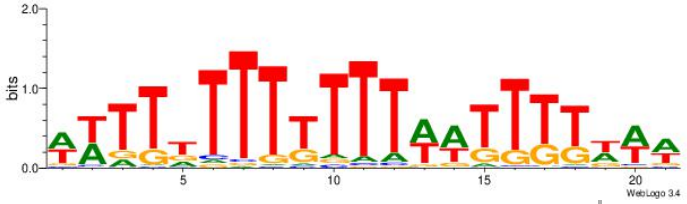
Original motif

Consensus sequence: WWWAAAAWWAAAAAAAAAWW



Reverse complement motif

Consensus sequence: WWTTTTTTTTTTWWTTTTWWW



Best Matches for Motif ID 10 (Highest to Lowest)

Motif ID:	UP00032
Motif name:	Gata3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement

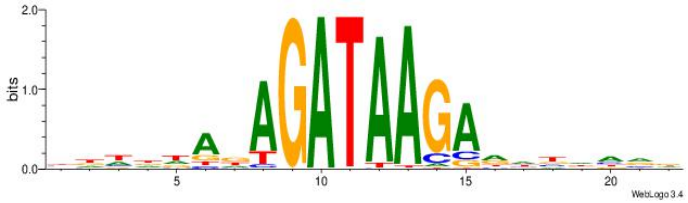
Direction:	Backward
Position number:	2
Number of overlap:	21
Similarity score:	0.0528064

Alignment:

```
HBHDVHDTCTTATCTHTDDHDV
WWTTTTTTTTTTWWTTTTWWW-
```

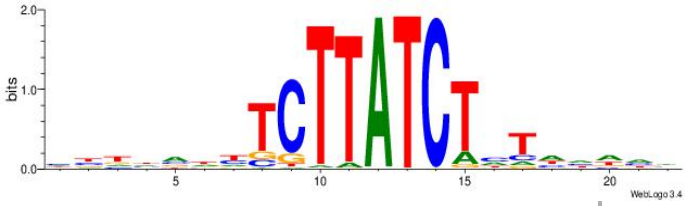
Original motif

Consensus sequence: BDHDDADAGATAAGADHBDHVD



Reverse complement motif

Consensus sequence: HBHDVHDTCTTATCTHTDDHDV



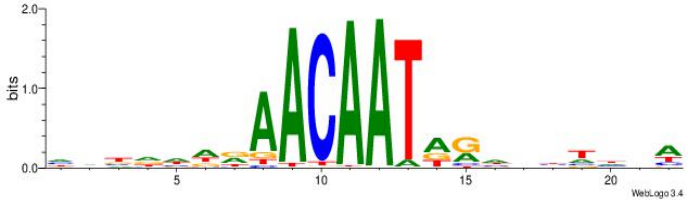
Motif ID:	UP00034
Motif name:	Sox7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	21
Similarity score:	0.0586273

Alignment:

```
HHBDHDDAACAATDRHHHHHBW
-WWWAAAAWWAAAAAAAAAAWW
```

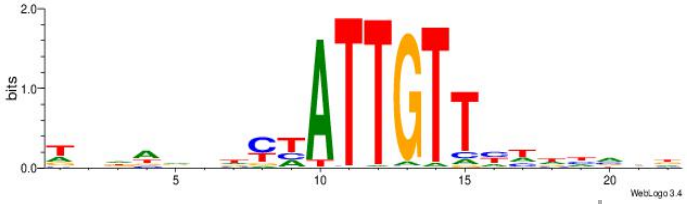
Original motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW



Reverse complement motif

Consensus sequence: WBHHHHHMDATTGTTHDHDVHH



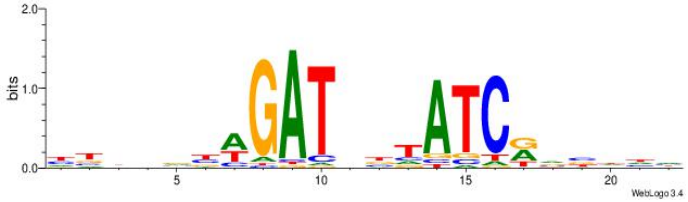
Motif ID:	UP00032
Motif name:	Gata3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	21
Similarity score:	0.0606713

Alignment:

```
HHHBBMGATAVHATCWVVDHVH
-WWWAAAAWWAAAAAAAAAWW
```

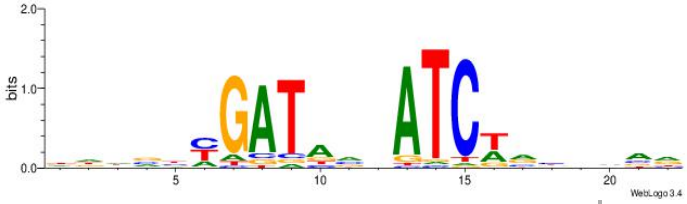
Original motif

Consensus sequence: HBHDVBWGATHBTATCRVBHHH



Reverse complement motif

Consensus sequence: HHHBBMGATAVHATCWVVDHVH



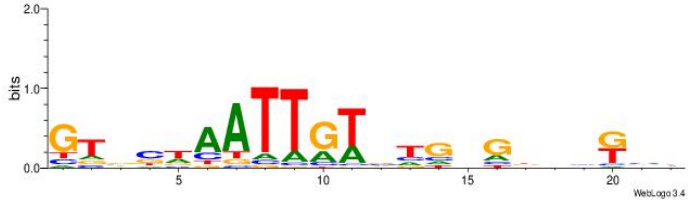
Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	21
Similarity score:	0.0617422

Alignment:

```
GTVBDAATTGTVTGHGDDHKVB
WWWAAAAWWAAAAAAAAAAWW-
```

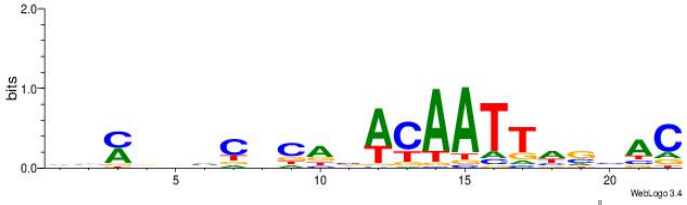
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif

Consensus sequence: VVYDDDCHCAVACAATTDBVAC

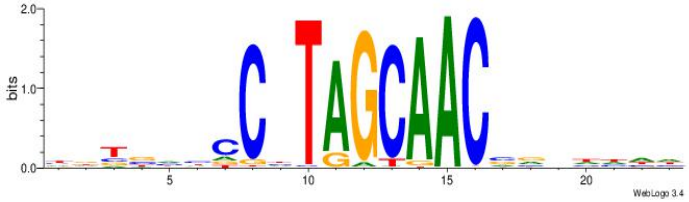


Motif ID:	UP00098
Motif name:	Rfx3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1

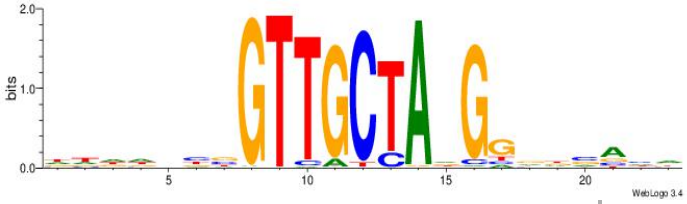
Number of overlap: 21
Similarity score: 0.065491

Alignment:
HDTBHHCCHTAGCAACVVDHHHH
WWWAAAAWWAAAAAAAAAAWW--

Original motif
Consensus sequence: HDTBHHCCHTAGCAACVVDHHHH

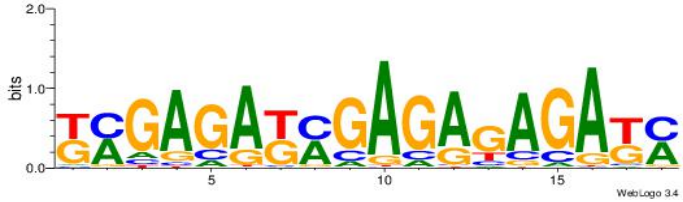


Reverse complement motif
Consensus sequence: HHHHDVVGTTGCTAHGGDHBAHH

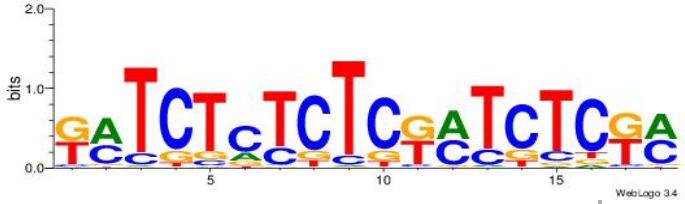


Dataset #: 1 Motif ID: 11 Motif name: C011

Original motif
Consensus sequence: KMGAGAKMGAGAGAGAKM



Reverse complement motif
Consensus sequence: RRTCTCTCTCRRTCTCRR



Best Matches for Motif ID 11 (Highest to Lowest)

Motif ID: UP00034
Motif name: Sox7_secondary
Species: Mus musculus

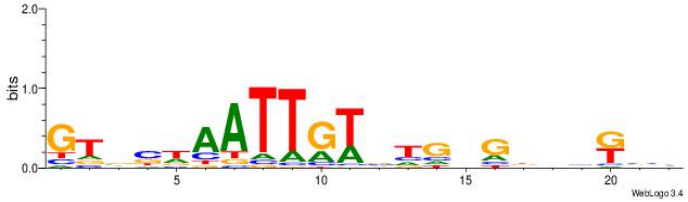
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	18
Similarity score:	0.0404807

Alignment:

```
VVYDDDCHCAVACAATTDBVAC
---RRTCTCTCTCRRTCTCRR-
```

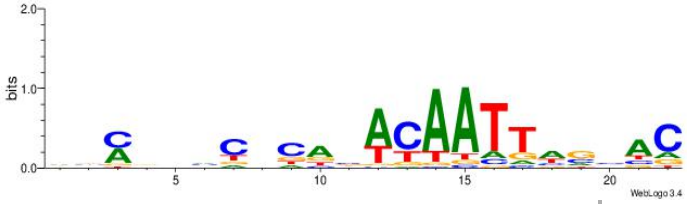
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif

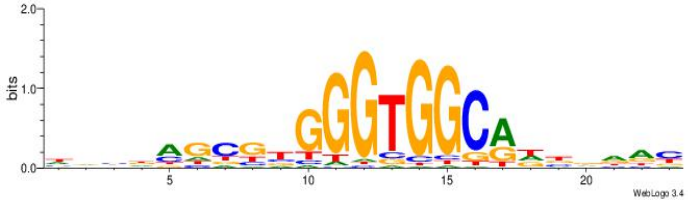
Consensus sequence: VVYDDDCHCAVACAATTDBVAC



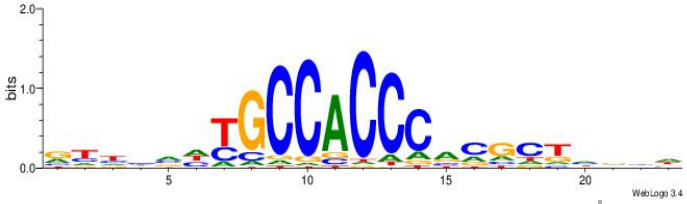
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	18
Similarity score:	0.0471227

Alignment:
BDDHVDKGCCACCCVCGCTDBVH
----RRTCTCTCTCRRTCTCRR-

Original motif
Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH

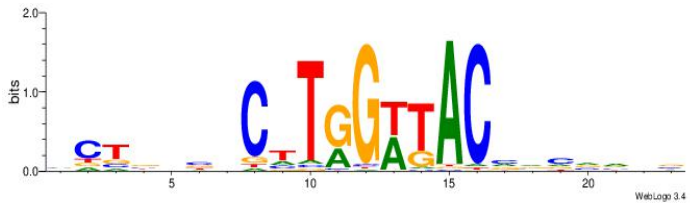


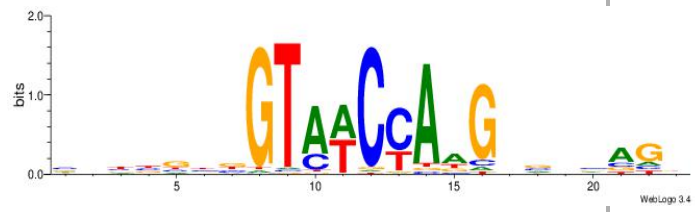
Motif ID:	UP00098
Motif name:	Rfx3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	18
Similarity score:	0.0474739

Alignment:
VCTBHBVCTTGGWTACVVVVVDB
RRTCTCTCTCRRTCTCRR-----

Original motif
Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB

Reverse complement motif
Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB





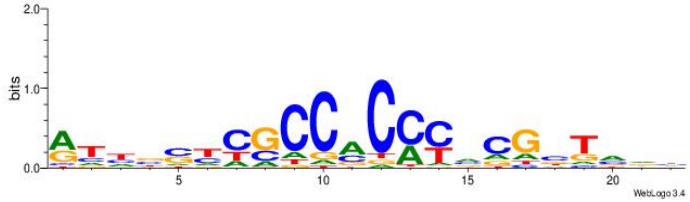
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	18
Similarity score:	0.0475854

Alignment:

```
HDBABCGBKRGYGGCGMSBHAK
--KMGAGAKMGAGAGAGAKM--
```

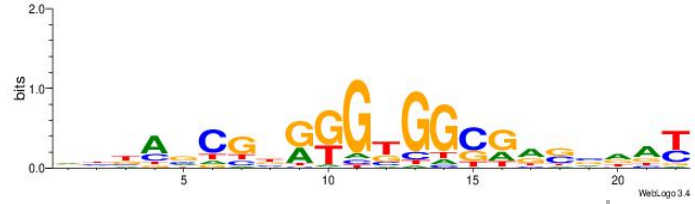
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



Motif ID:	UP00540

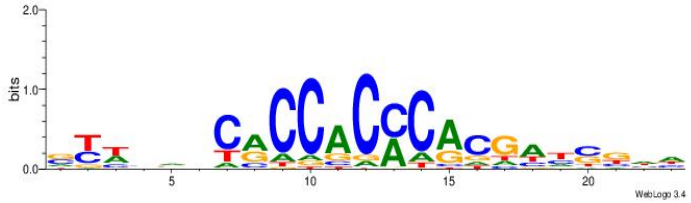
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	18
Similarity score:	0.0500023

Alignment:

```
HHBSHTCGTGRGTGGKGDBVWMV
---KMGAGAKMGAGAGAGAKM--
```

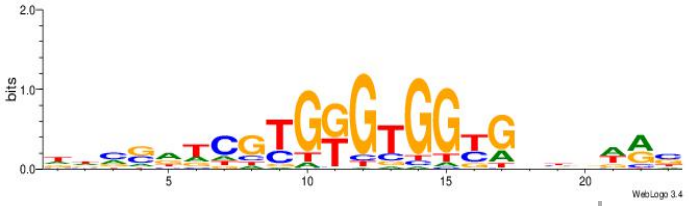
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



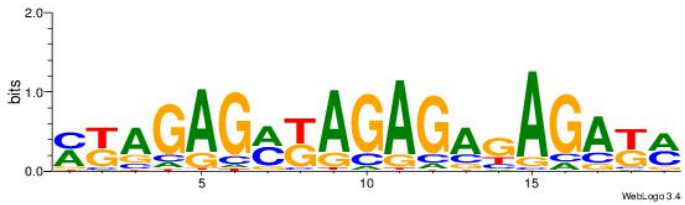
Dataset #: 1 Motif ID: 12 Motif name: C012

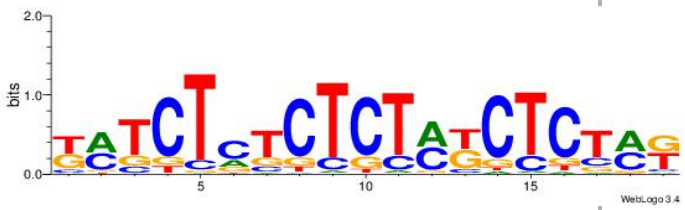
Original motif

Consensus sequence: MKAGAGMKAGAGAGAGAKM

Reverse complement motif

Consensus sequence: YRTCTCTCTCTRYCTCTRR





Best Matches for Motif ID 12 (Highest to Lowest)

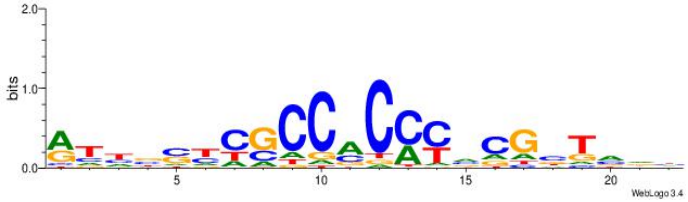
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	19
Similarity score:	0.0419739

Alignment:

```
HDBABCGBKRGYGGCGMSBHAK
-MKAGAGMKAGAGAGAGAKM--
```

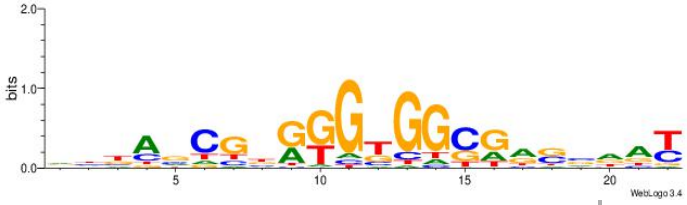
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



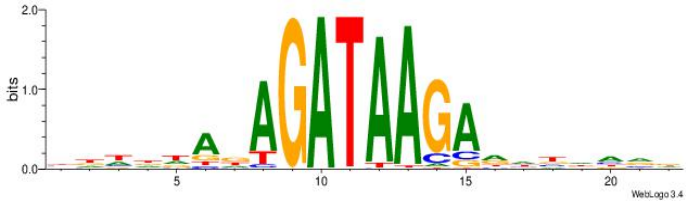
Motif ID:	UP00032
Motif name:	Gata3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	19
Similarity score:	0.0446412

Alignment:

```
HBHDVHDTCTTATCTHTDDHDV
YRTCTCTCTCTRYCTCTRR---
```

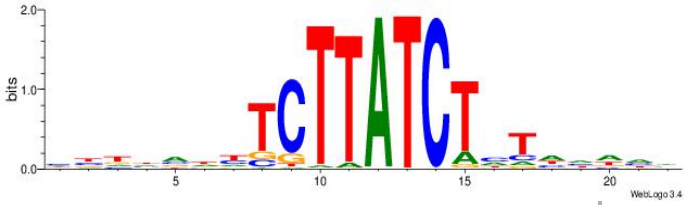
Original motif

Consensus sequence: BDHDDADAGATAAGADHBDHVD



Reverse complement motif

Consensus sequence: HBHDVHDTCTTATCTHTDDHDV

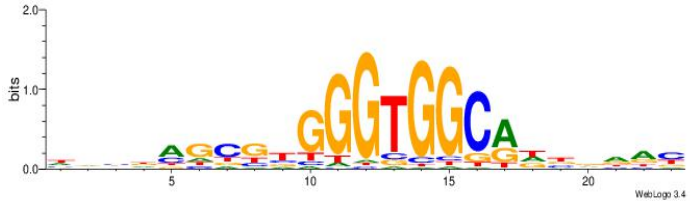


Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3

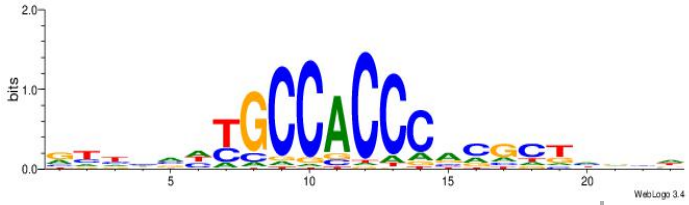
Number of overlap: 19
Similarity score: 0.0455704

Alignment:
HVBDAGCGBGGGTGGCRDBDDDB
--MKAGAGMKAGAGAGAGAKM--

Original motif
Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



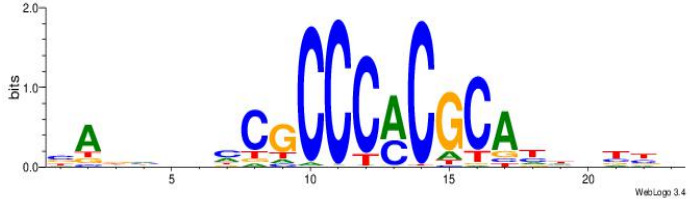
Motif ID: UP00400
Motif name: Zif268
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 3
Number of overlap: 19
Similarity score: 0.0502954

Alignment:
VVVDHHTGCGYGGGCGDHVHHTB
--MKAGAGMKAGAGAGAGAKM--

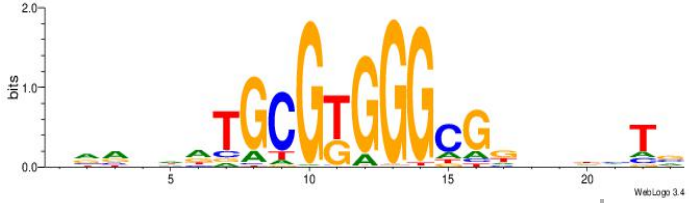
Original motif

Reverse complement motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB



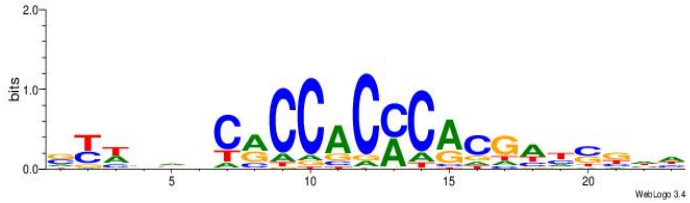
Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	19
Similarity score:	0.0510365

Alignment:

```
HHBSHTCGTGRGTGGKGDBVWMV
--MKAGAGMKAGAGAGAGAKM--
```

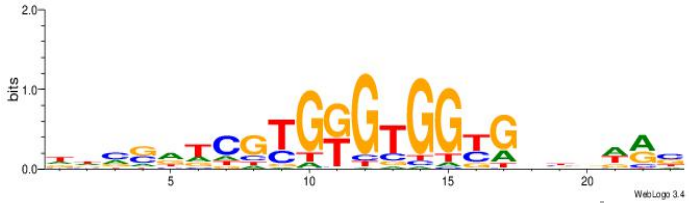
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

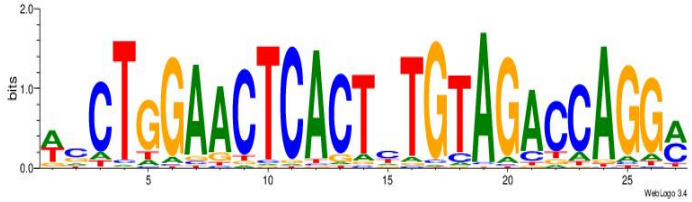
Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



Dataset #: 1 **Motif ID: 13** **Motif name: C013**

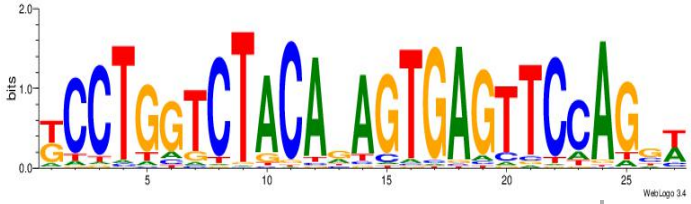
Original motif

Consensus sequence: WVCTGGAACTCACTHTGTAGACCAGGM



Reverse complement motif

Consensus sequence: YCCTGGTCTACADAGTGAGTTCCAG



Best Matches for Motif ID 13 (Highest to Lowest)

Motif ID:	UP00528
Motif name:	Foxm1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	22
Similarity score:	0.0456555

Alignment:

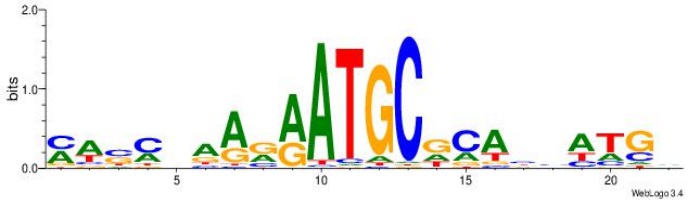
```
-----MWSMBAARRATGCDCABHATGD
WVCTGGAACTCACTHTGTAGACCAGGM-----
```

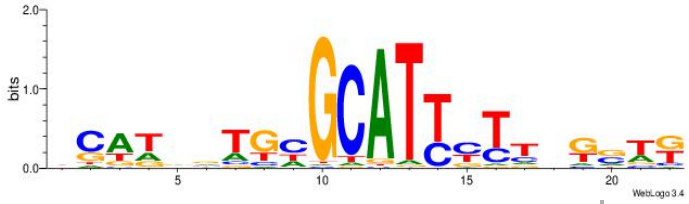
Original motif

Consensus sequence: MWSMBAARRATGCDCABHATGD

Reverse complement motif

Consensus sequence: DCATDBTGHGCATKMTTBRSWR





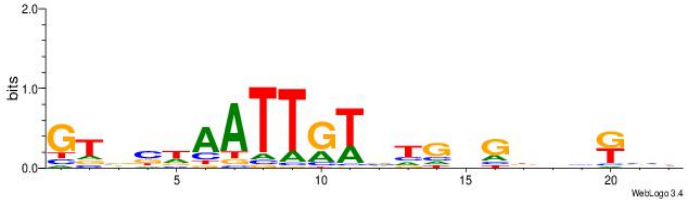
Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	22
Similarity score:	0.0503111

Alignment:

```
VVYDDDCHCAVACAATTDBVAC-----
-----YCCTGGTCTACADAGTGAGTTCCAGVW
```

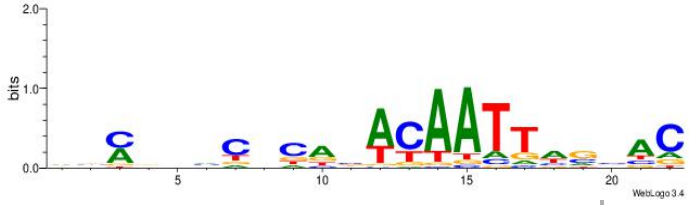
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif

Consensus sequence: VVYDDDCHCAVACAATTDBVAC



Motif ID:	UP00526
Motif name:	Foxn1_primary

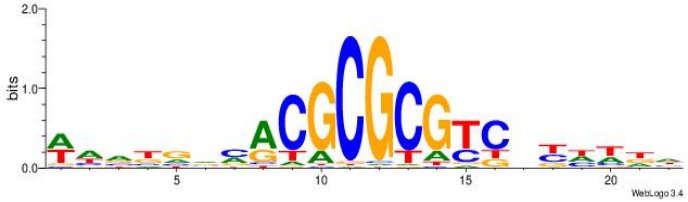
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	22
Similarity score:	0.0518427

Alignment:

```
-----WHVBVVMACGCGCGTCDYHWDH
WVCTGGAACTCACTHTGTAGACCAGGM-----
```

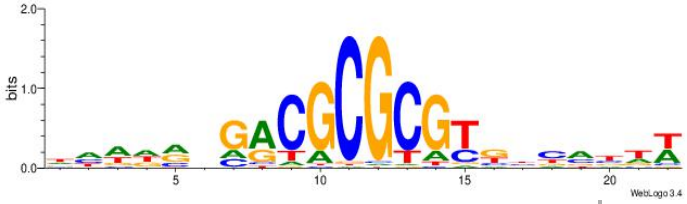
Original motif

Consensus sequence: WHVBVVMACGCGCGTCDYHWDH



Reverse complement motif

Consensus sequence: HDWHMHGACGCGCGTRBVVBHW



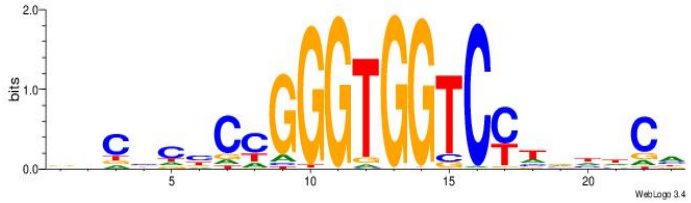
Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	21
Similarity score:	0.546981

Alignment:

```
------BHCBCBCCGGGTGGTCYHVHDCH
WVCTGGAACTCACTHTGTAGACCAGGM------
```

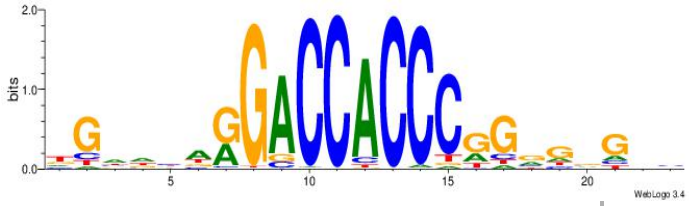
Original motif

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:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	21
Similarity score:	0.549369

Alignment:

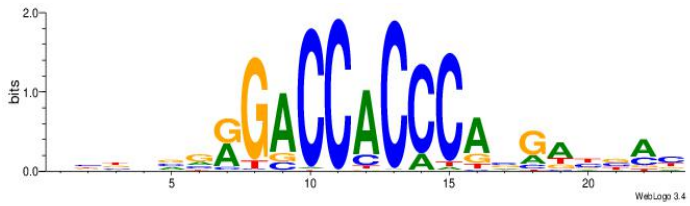
```
------BTBVTCVTGGGTGGTCMVVDVBB
YCCTGGTCTACADAGTGAGTTCCAGVW--
```

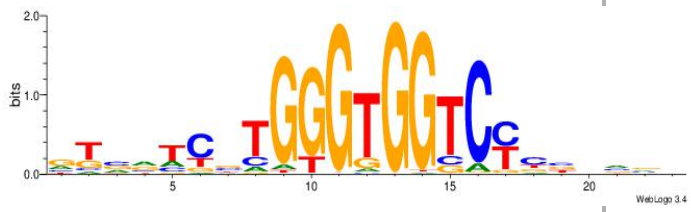
Original motif

Consensus sequence: BBBDVVRGACCACCCAVGABBAB

Reverse complement motif

Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB

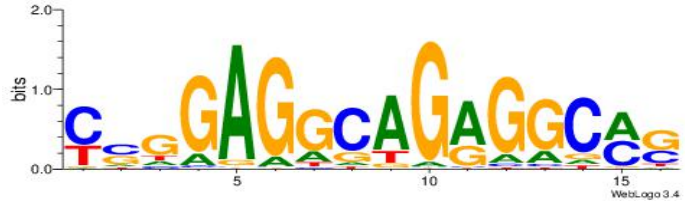




Dataset #: 1 **Motif ID: 14** **Motif name: C014**

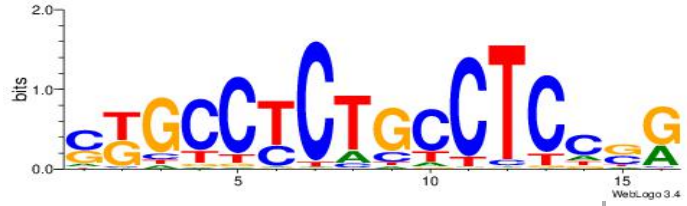
Original motif

Consensus sequence: YSGGAGGCAGAGGCMS



Reverse complement motif

Consensus sequence: SYGCCTCTGCCTCCSK



Best Matches for Motif ID 14 (Highest to Lowest)

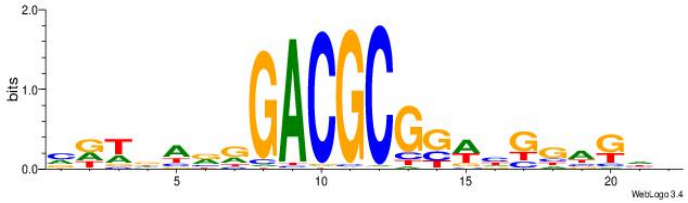
Motif ID:	UP00527
Motif name:	Foxn4_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	16
Similarity score:	0.0331356

Alignment:

VHYTCCDWCCGCGTCMMTHWHV
--SYGCCTCTGCCTCCSK----

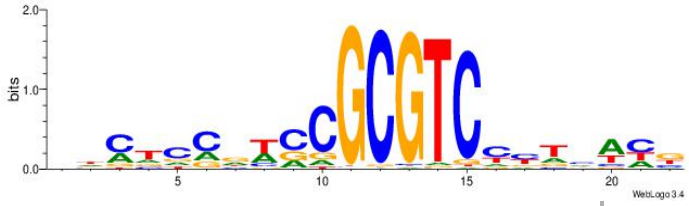
Original motif

Consensus sequence: VDWDARRGACGCGGWHGGAKHV



Reverse complement motif

Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV



Motif ID:	UP00068
Motif name:	Eomes_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	16
Similarity score:	0.034812

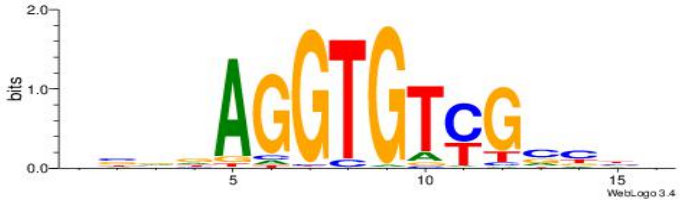
Alignment:
VVBVCKACACCTHVBV
SYGCCTCTGCCTCCSK

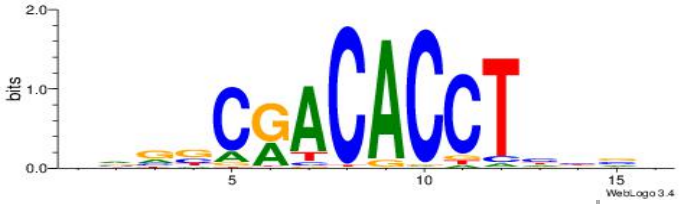
Original motif

Consensus sequence: VBVDAGGTGTYGVBBV

Reverse complement motif

Consensus sequence: VVBVCKACACCTHVBV





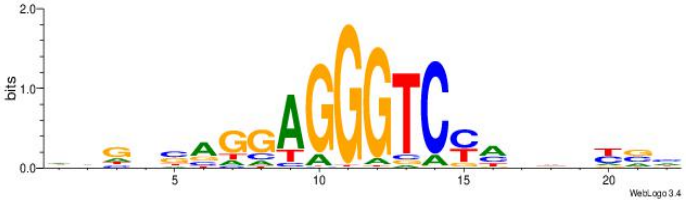
Motif ID:	UP00539
Motif name:	Gli2_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	7
Number of overlap:	16
Similarity score:	0.034835

Alignment:

```
HVGVSAGGAGGGTCYHHHHYVH
YSGGAGGCAGAGGCMS------
```

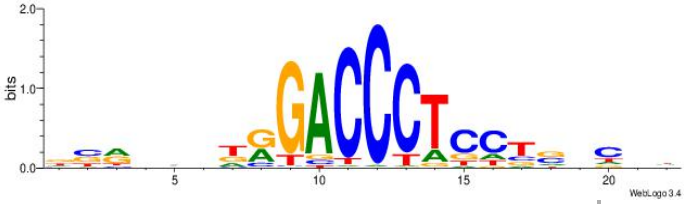
Original motif

Consensus sequence: HVGVSAGGAGGGTCYHHHHYVH



Reverse complement motif

Consensus sequence: DVMHHDHKGACCCTCCTSVCBH



Motif ID:	UP00002

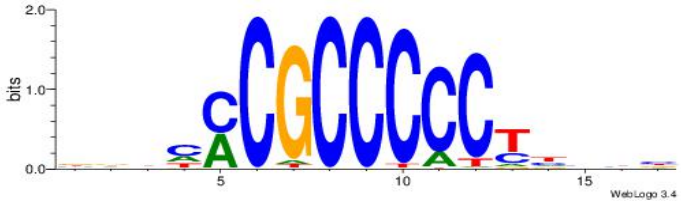
Motif name:	Sp4_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	16
Similarity score:	0.034915

Alignment:

```
BDHHMCGCCCCCTHVBB
-SYGCCTCTGCCTCCSK
```

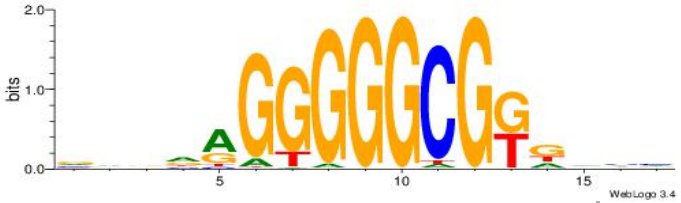
Original motif

Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif

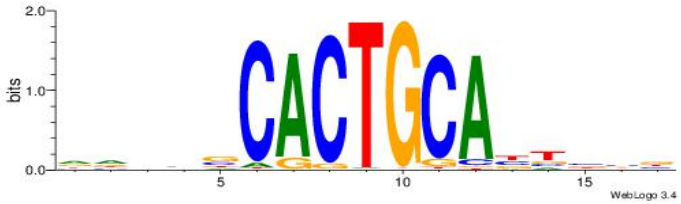
Consensus sequence: BVVHAGGGGGCGRDHHB



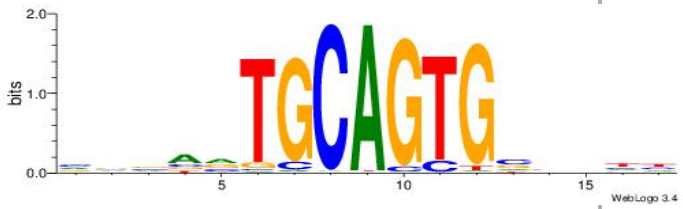
Motif ID:	UP00031
Motif name:	Zbtb3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	16
Similarity score:	0.0350751

Alignment:
BBBAVTGCAGTGBBVDD
-SYGCCTCTGCCTCCSK

Original motif
Consensus sequence: DDBBBCACTGCABTBBB

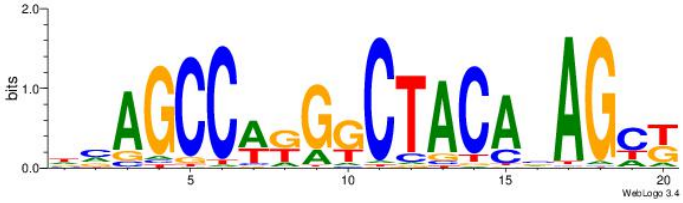


Reverse complement motif
Consensus sequence: BBBAVTGCAGTGBBVDD

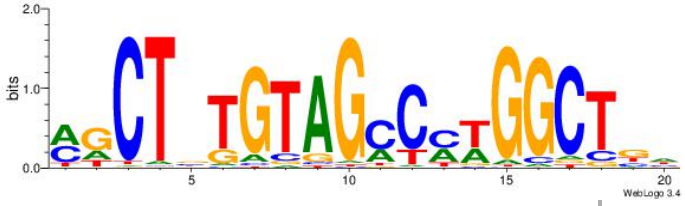


Dataset #: 1 Motif ID: 15 Motif name: C015

Original motif
Consensus sequence: DVAGCCWKGGCTACAVAGCK



Reverse complement motif
Consensus sequence: RGCTVTGTAGCCYWGGCTVD



Best Matches for Motif ID 15 (Highest to Lowest)

Motif ID:	UP00098
Motif name:	Rfx3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif

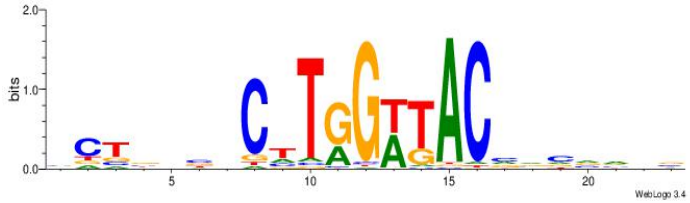
Direction:	Backward
Position number:	2
Number of overlap:	20
Similarity score:	0.0486537

Alignment:

```
VCTBHBVCTTGGWTACVVVVVDB
--DVAGCCWKGGCTACAVAGCK-
```

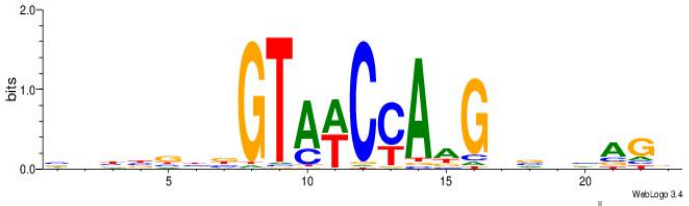
Original motif

Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB



Reverse complement motif

Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB



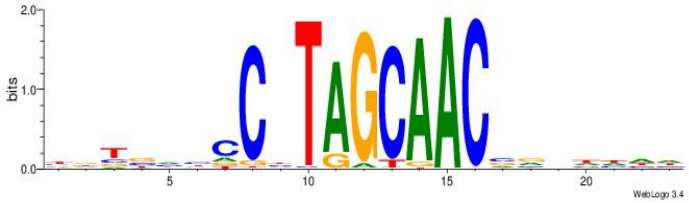
Motif ID:	UP00098
Motif name:	Rfx3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	20
Similarity score:	0.0536153

Alignment:

HDTBHHCCHTAGCAACVVDHHHH
--DVAGCCWKGGCTACAVAGCK-

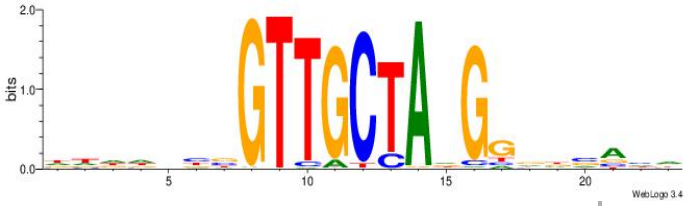
Original motif

Consensus sequence: HDTBHHCCHTAGCAACVVDHHHH



Reverse complement motif

Consensus sequence: HHHHDVVGTTGCTAHGGDHBAHH



Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	20
Similarity score:	0.0624325

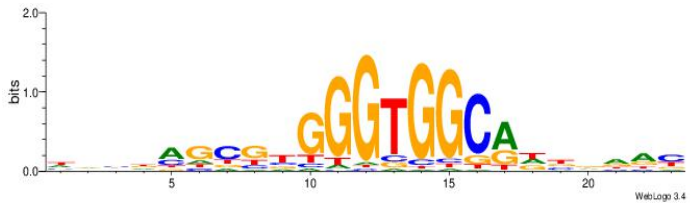
Alignment:
BDDHVDKGCCACCCVCGCTDBVH
-RGCTVTGTAGCCYWGGCTVD--

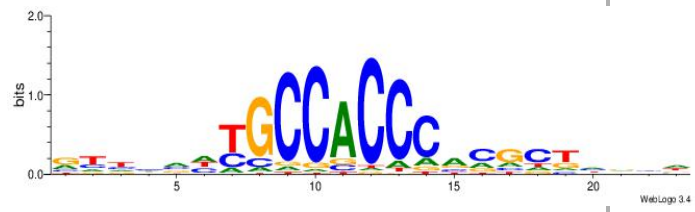
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB

Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH





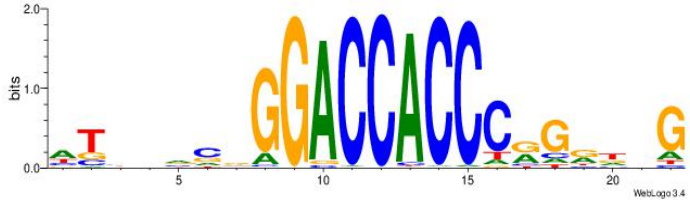
Motif ID:	UP00539
Motif name:	Gli2_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	20
Similarity score:	0.0635845

Alignment:

```
CBDMCMGGGTGGTCCHVBVBAH
--RGCTVTGTAGCCYWGGCTVD
```

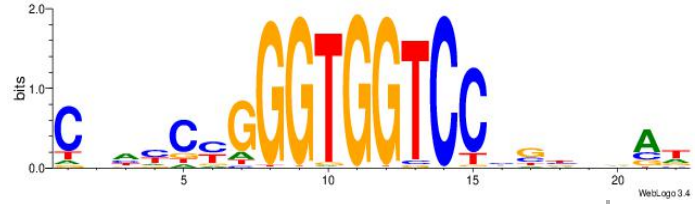
Original motif

Consensus sequence: HTBVVVDGGACCACCCRGRDBG



Reverse complement motif

Consensus sequence: CBDMCMGGGTGGTCCHVBVBAH



Motif ID:	UP00540

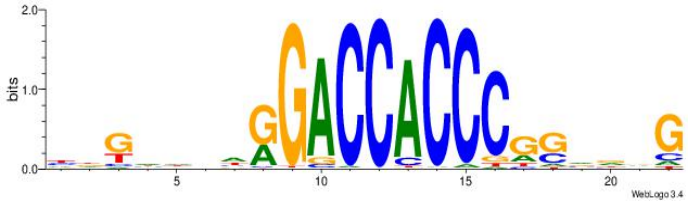
Motif name:	Gli3_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	20
Similarity score:	0.0640763

Alignment:

```
CVHBSCGGGTGGTCMHVHHCDH
--RGCTVTGTAGCCYWGGCTVD
```

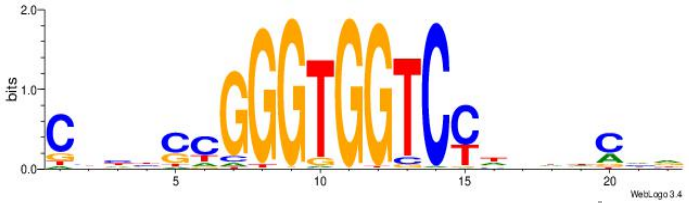
Original motif

Consensus sequence: HDGHHBHRGACCACCCGSVDVG



Reverse complement motif

Consensus sequence: CVHBSCGGGTGGTCMHVHHCDH



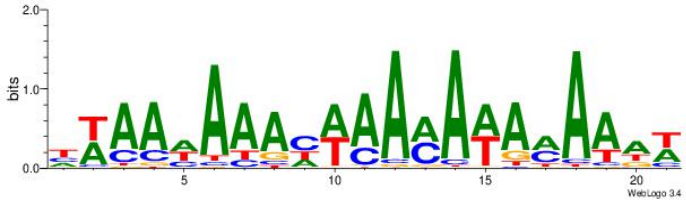
Dataset #: 1 Motif ID: 16 Motif name: C016

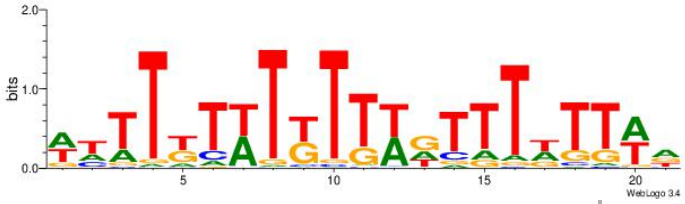
Original motif

Consensus sequence: HWAAWAAAHWAAMAWAMAAWW

Reverse complement motif

Consensus sequence: WWTTYTWTYTTWDTTTWTTWH





Best Matches for Motif ID 16 (Highest to Lowest)

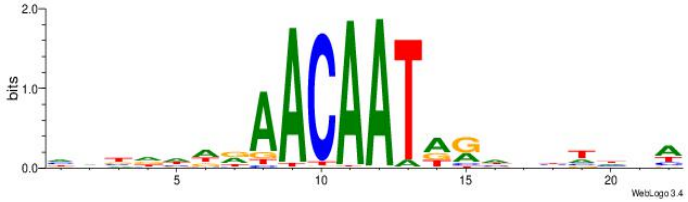
Motif ID:	UP00034
Motif name:	Sox7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	21
Similarity score:	0.0445695

Alignment:

```
HHBDHDDAACAATDRHHHHHBW
-HWAAWAAAHWAAMAWAMAAWW
```

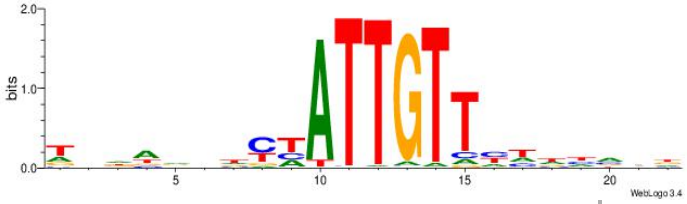
Original motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW



Reverse complement motif

Consensus sequence: WBHHHHHMDATTGTTHDHDVHH



Motif ID: UP00032

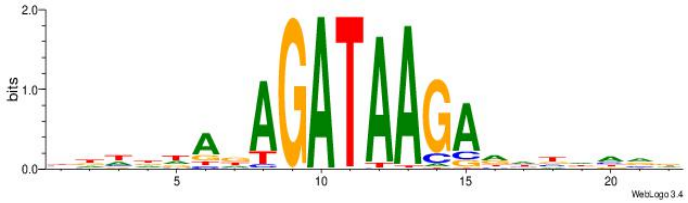
Motif name:	Gata3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	21
Similarity score:	0.0472803

Alignment:

```
HBHDVHDTCTTATCTHTDDHDV
WWTTYTWTYTTWDTTTWTTWH-
```

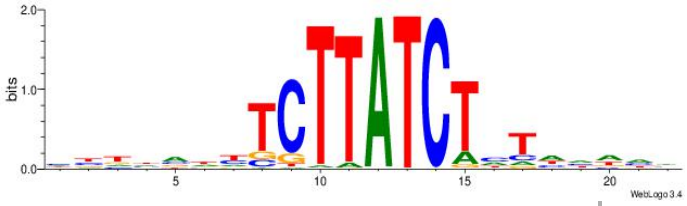
Original motif

Consensus sequence: BDHDDADAGATAAGADHBDHVD



Reverse complement motif

Consensus sequence: HBHDVHDTCTTATCTHTDDHDV

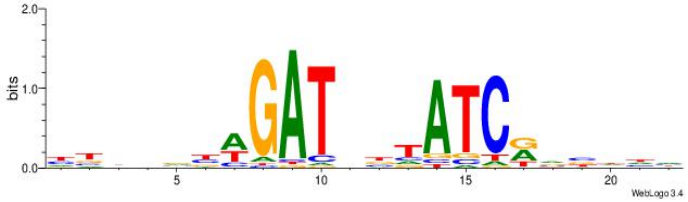


Motif ID:	UP00032
Motif name:	Gata3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	21

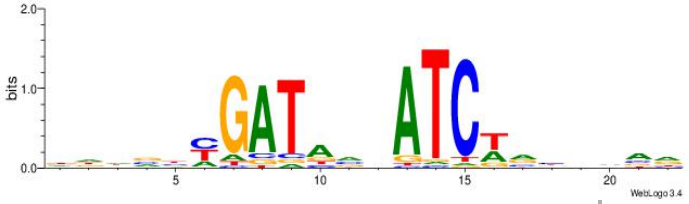
Similarity score: 0.0518988

Alignment:
HHHBBMGATAVHATCWVVDHVH
-HWAAWAAAHWAAMAWAMAAWW

Original motif
Consensus sequence: HBHDVBWGATHBTATCRVBHHH



Reverse complement motif
Consensus sequence: HHHBBMGATAVHATCWVVDHVH

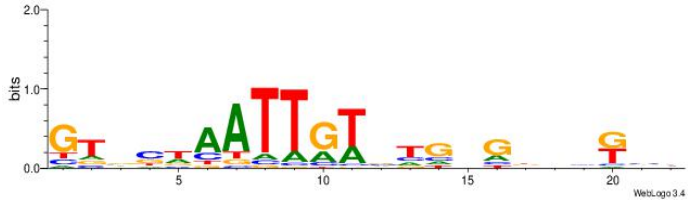


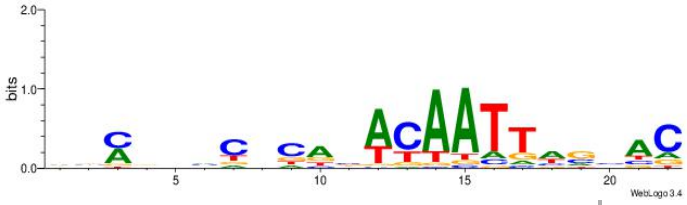
Motif ID: UP00034
Motif name: Sox7_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 2
Number of overlap: 21
Similarity score: 0.0523549

Alignment:
VVYDDDCHCAVACAATTDBVAC
HWAAWAAAHWAAMAWAMAAWW-

Original motif
Consensus sequence: GTVBDAATTGTVTGHGDDHKVB

Reverse complement motif
Consensus sequence: VVYDDDCHCAVACAATTDBVAC





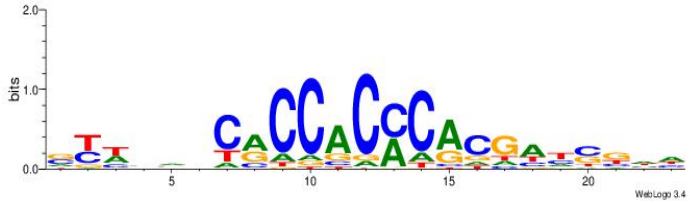
Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	21
Similarity score:	0.0599775

Alignment:

```
VYWVVHCRCCACMCACGAHSBHH
-HWAAWAAAHWAAMAWAMAAWW-
```

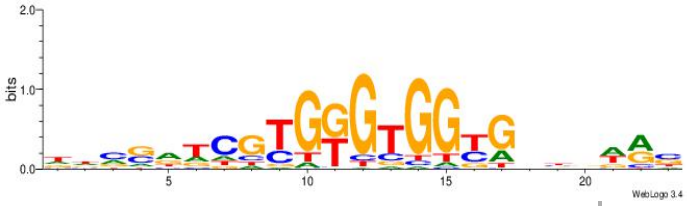
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

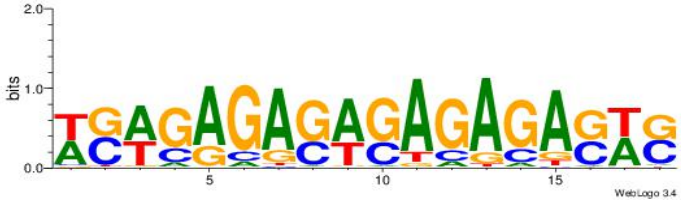
Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



Dataset #: 1 **Motif ID: 17** **Motif name: C017**

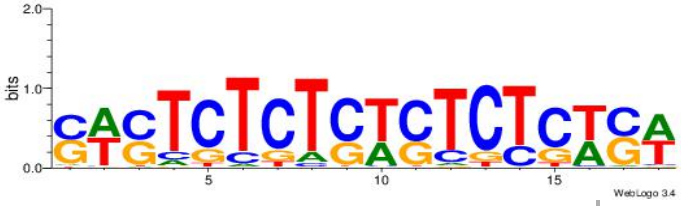
Original motif

Consensus sequence: WSWGAGASWSAGAGASWS



Reverse complement motif

Consensus sequence: SWSTCTCTSWSTCTCWSW



Best Matches for Motif ID 17 (Highest to Lowest)

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:	3
Number of overlap:	18
Similarity score:	0.0370092

Alignment:

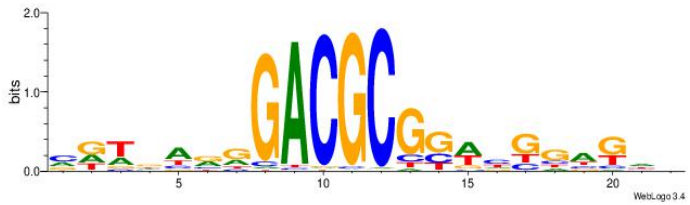
```
VDWDARRGACGCGGWHGGAKHV
--WSWGAGASWSAGAGASWS--
```

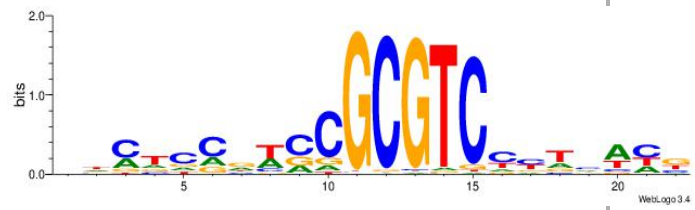
Original motif

Consensus sequence: VDWDARRGACGCGGWHGGAKHV

Reverse complement motif

Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV





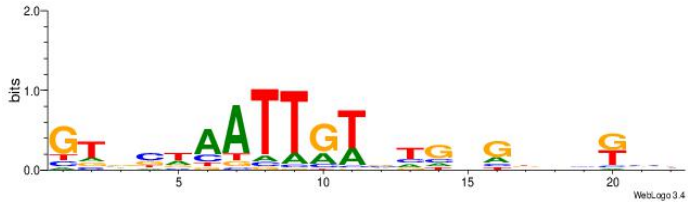
Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	18
Similarity score:	0.0399153

Alignment:

```
VVYDDDCHCAVACAATTDBVAC
--SWSTCTCTSWSTCTCWSW--
```

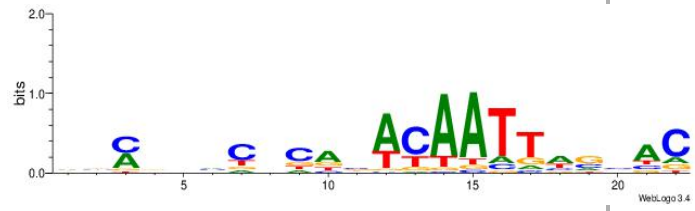
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif

Consensus sequence: VVYDDDCHCAVACAATTDBVAC



Motif ID:	UP00538

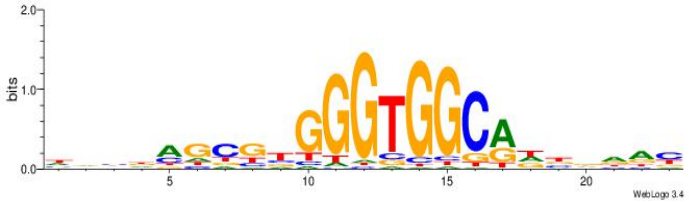
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	18
Similarity score:	0.0422644

Alignment:

```
HVBDAGCGBGGGTGGCRDBDDDB
WSWGAGASWSAGAGASWS-----
```

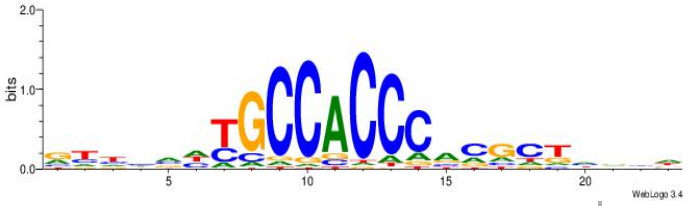
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH

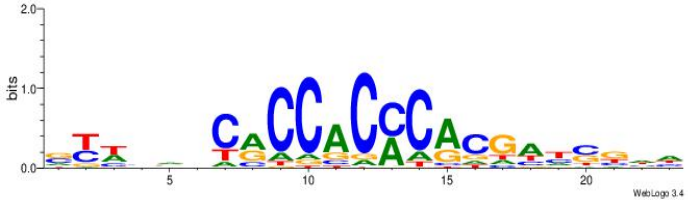


Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	18

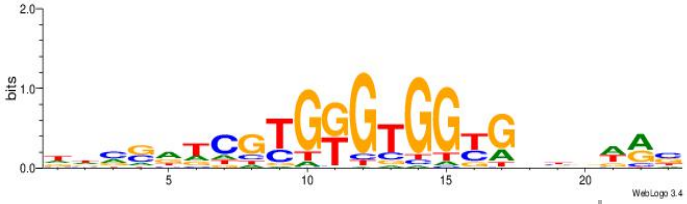
Similarity score: 0.0425861

Alignment:
HHBSHTCGTGRGTGGKGDBVWMV
----WSWGAGASWSAGAGASWS-

Original motif
Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif
Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV

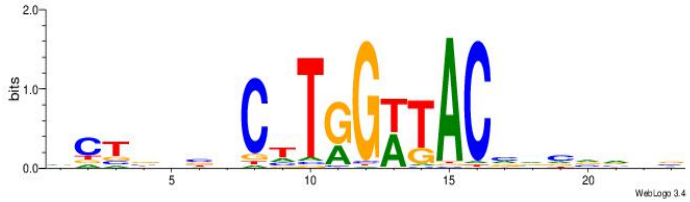


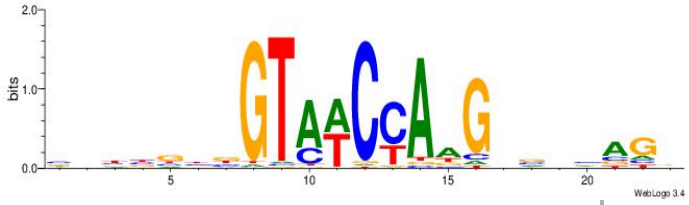
Motif ID: UP00098
Motif name: Rfx3_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 4
Number of overlap: 18
Similarity score: 0.0439386

Alignment:
BDBBVBVGTAWCCAAGVBHBAGB
--WSWGAGASWSAGAGASWS---

Original motif
Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB

Reverse complement motif
Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB

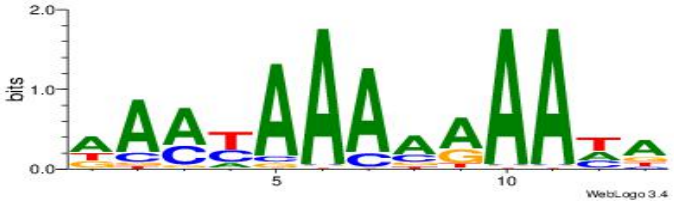




Dataset #: 1 **Motif ID: 18** **Motif name: C018**

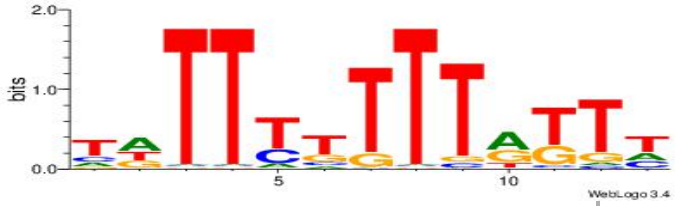
Original motif

Consensus sequence: AAMYAAAAAAAHA



Reverse complement motif

Consensus sequence: THTTTTTTTMYTT



Best Matches for Motif ID 18 (Highest to Lowest)

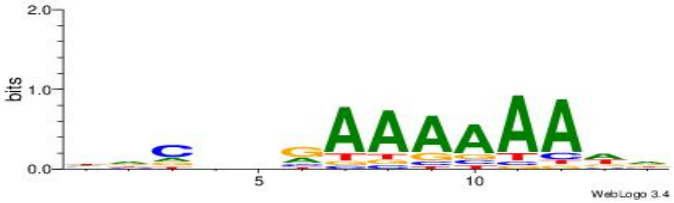
Motif ID:	UP00028
Motif name:	Tcfap2e_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	13
Similarity score:	0.0145388

Alignment:

HDCDBRAAAAAADD
-AAMYAAAAAAAHA

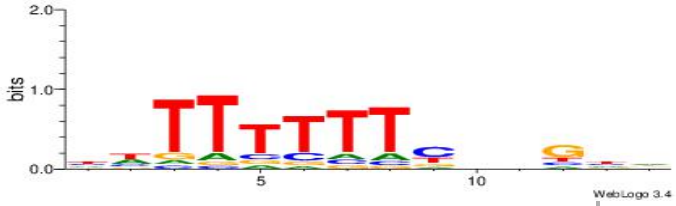
Original motif

Consensus sequence: HDCDBRAAAAAADD



Reverse complement motif

Consensus sequence: DDTTTTTTMBDGDH



Motif ID:	UP00077
Motif name:	Srf_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	13
Similarity score:	0.0166921

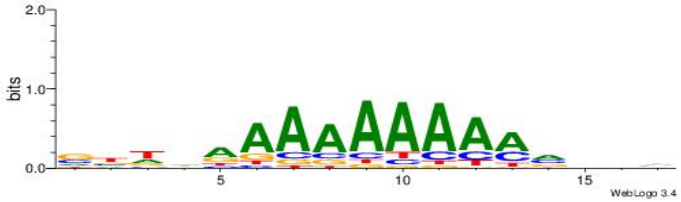
Alignment:
VBDDAAAAAAAAMVBHH
----AAMYAAAAAAAHA

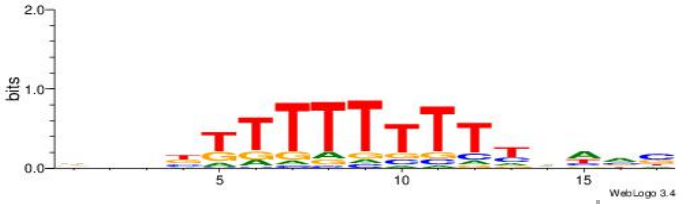
Original motif

Consensus sequence: VBDDAAAAAAAAMVBHH

Reverse complement motif

Consensus sequence: HHVBYTTTTTTTTDDVV





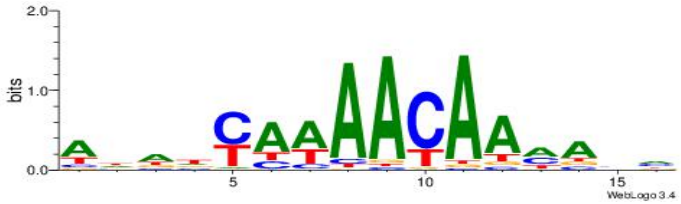
Motif ID:	UP00061
Motif name:	Foxl1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	13
Similarity score:	0.0192633

Alignment:

```
ADDDYAWAACAAMAHH
-AAMYAAAAAAAHA--
```

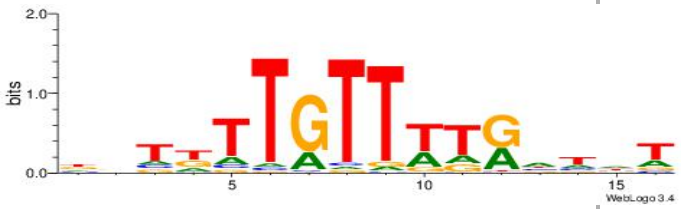
Original motif

Consensus sequence: ADDDYAWAACAAMAHH



Reverse complement motif

Consensus sequence: HDTYTTGTTWTKDDDT



Motif ID:	UP00134

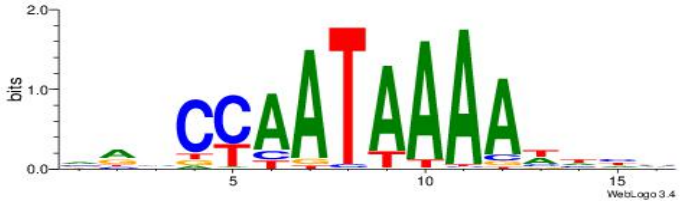
Motif name:	Hoxb13
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	13
Similarity score:	0.0204511

Alignment:

```
VRHCCAATAAAAWHHV
-AAMYAAAAAAAHA--
```

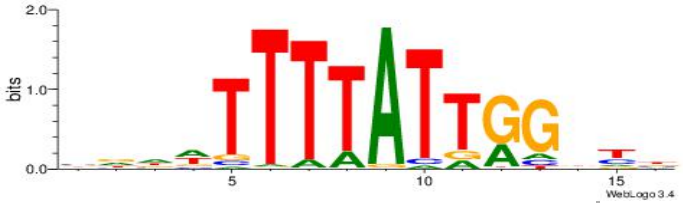
Original motif

Consensus sequence: VRHCCAATAAAAWHHV



Reverse complement motif

Consensus sequence: VDHWTTTTATTGGDKB

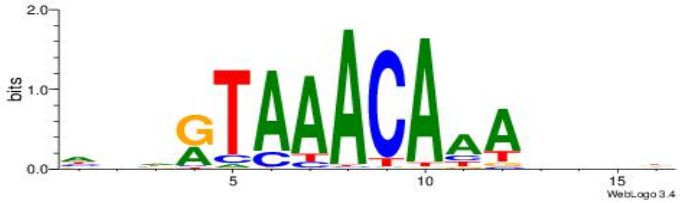


Motif ID:	UP00041
Motif name:	Foxj1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	13

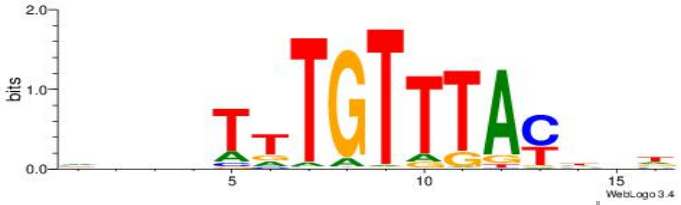
Similarity score: 0.0217367

Alignment:
HDHRTAAACAAAHDDD
-AAMYAAAAAAAHA--

Original motif
Consensus sequence: HDHRTAAACAAAHDDD

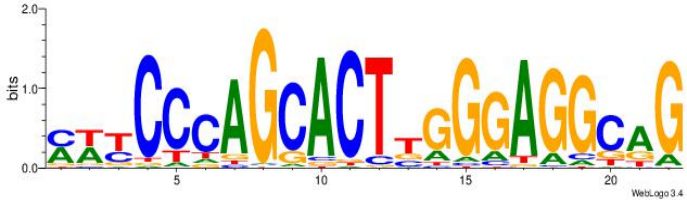


Reverse complement motif
Consensus sequence: DDDHTTTGTTTAMHDH

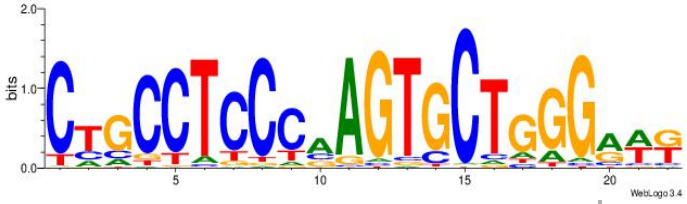


Dataset #: 1 Motif ID: 19 Motif name: C019

Original motif
Consensus sequence: MWYCCCAGCACTTGGGAGGCAG



Reverse complement motif
Consensus sequence: CTGCCTCCCAAGTGCTGGGMWR



Best Matches for Motif ID 19 (Highest to Lowest)

Motif ID:	UP00050
Motif name:	Bhlhb2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif

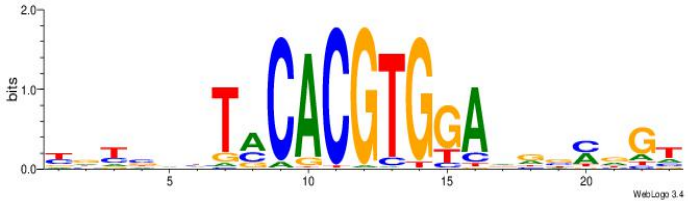
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	22
Similarity score:	0.041956

Alignment:

```
YDYBDHTMCACGTGGADDBMDGT
MWYCCCAGCACTTGGGAGGCAG-
```

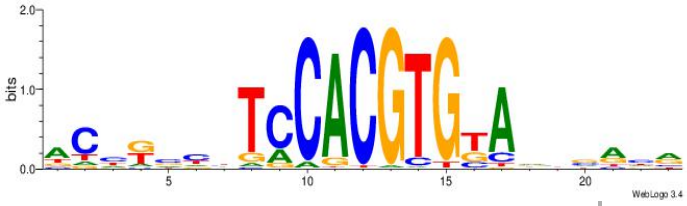
Original motif

Consensus sequence: YDYBDHTMCACGTGGADDBMDGT



Reverse complement motif

Consensus sequence: ACHRBHDTCCACGTGYAHHBMHM



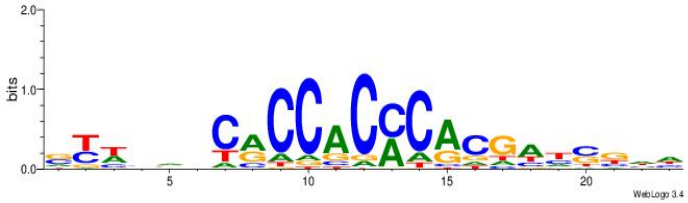
Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	22
Similarity score:	0.0441925

Alignment:

HHBSHTCGTGRGTGGKGDBVWMV
CTGCCTCCCAAGTGCTGGGMWR-

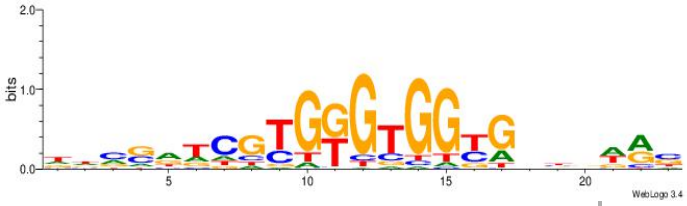
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



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:	22
Similarity score:	0.0552063

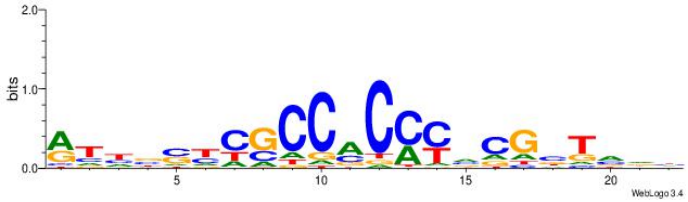
Alignment:
HDBABCGBKRGYGGCGMSBHAK
MWYCCCAGCACTTGGGAGGCAG

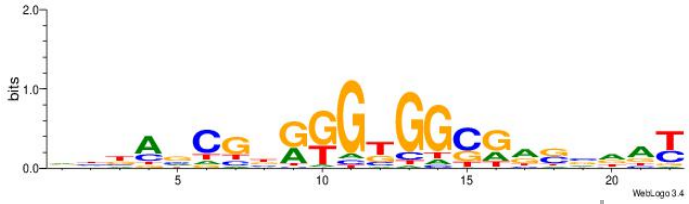
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH

Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK





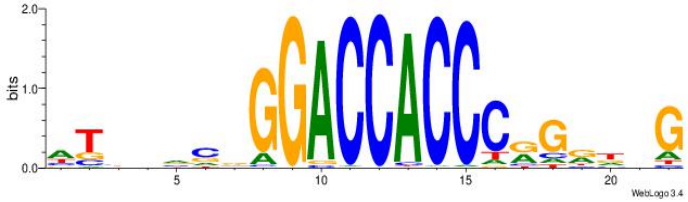
Motif ID:	UP00539
Motif name:	Gli2_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	22
Similarity score:	0.0596824

Alignment:

```
HTBVVVDGGACCACCCRGRDBG
MWYCCCAGCACTTGGGAGGCAG
```

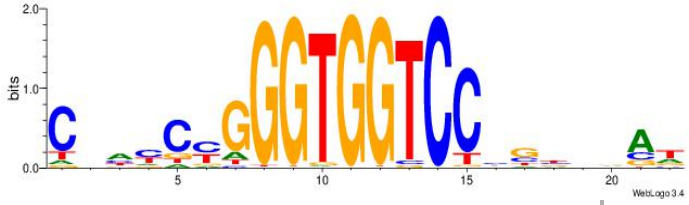
Original motif

Consensus sequence: HTBVVVDGGACCACCCRGRDBG



Reverse complement motif

Consensus sequence: CBDMCMGGGTGGTCCHVBVBAH



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:	0.0599404

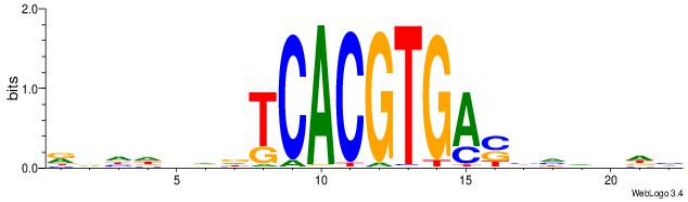
Alignment:

DDHBHBSTCACGTGAHBBDHHM

CTGCCTCCCAAGTGCTGGGMWR

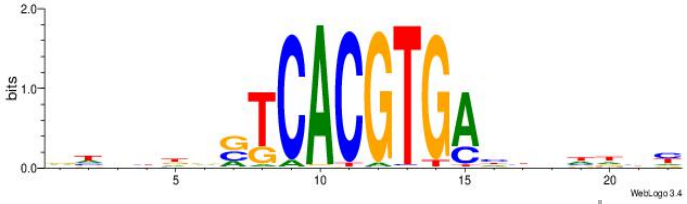
Original motif

Consensus sequence: RDHDBVDTCACGTGASBHVHDH



Reverse complement motif

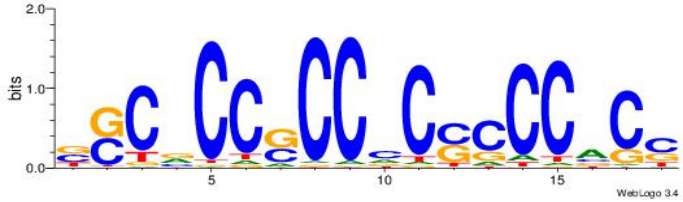
Consensus sequence: DDHBHBSTCACGTGAHBBDHHM



Dataset #: 1 Motif ID: 20 Motif name: C020

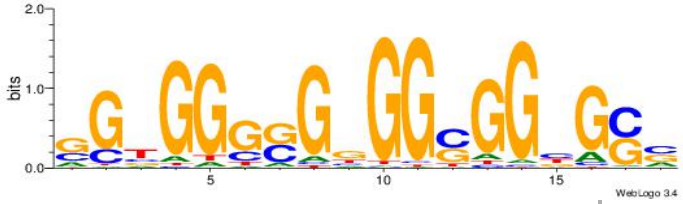
Original motif

Consensus sequence: BSCVCCSCCVCSCCCACS



Reverse complement motif

Consensus sequence: SGTGGGSGVGGSGGVGSB



Best Matches for Motif ID 20 (Highest to Lowest)

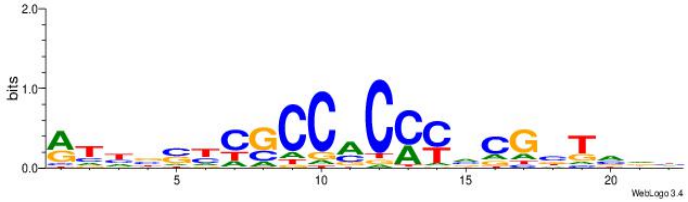
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	18
Similarity score:	0.0350167

Alignment:

```
HDBABCGBKRGYGGCGMSBHAK
SGTGGGSGVGGSGGVGSB----
```

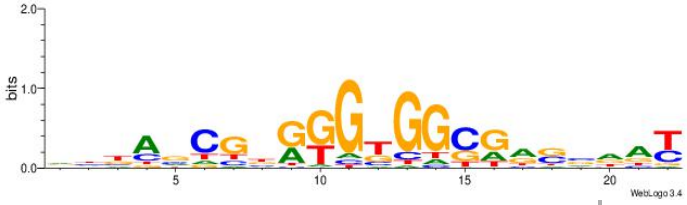
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement

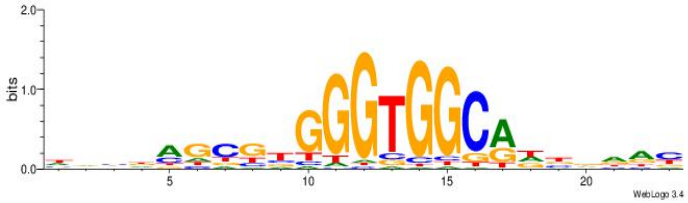
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	18
Similarity score:	0.0412841

Alignment:

```
HVBDAGCGBGGGTGGCRDBDDDB
-SGTGGGSGVGGSGGVGSB----
```

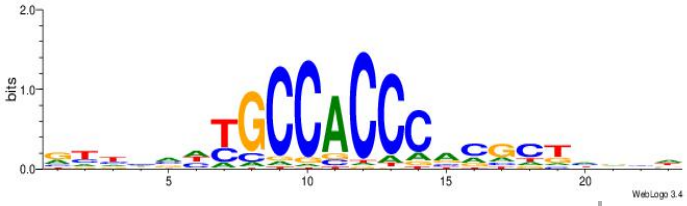
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



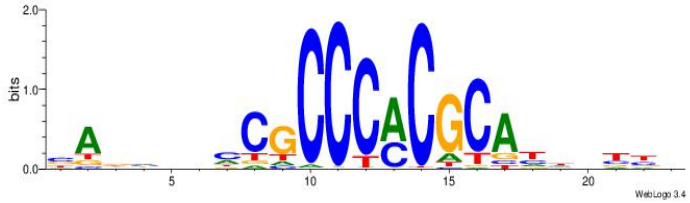
Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	18
Similarity score:	0.0415056

Alignment:

BADHBDHCGCCCMCGCAHHDBBV
--BSCVCCSCCVCSCCCACS---

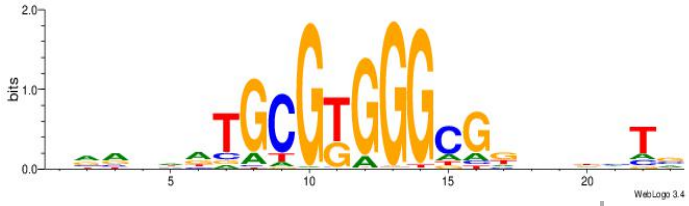
Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif

Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB



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:	5
Number of overlap:	18
Similarity score:	0.0438926

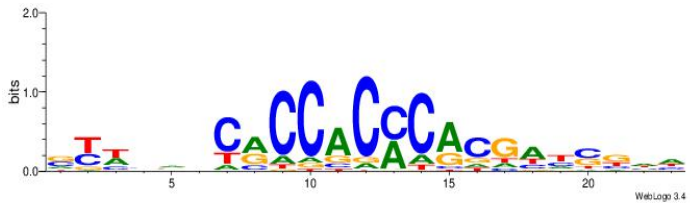
Alignment:
VYWVVHCRCCACMCACGAHSBHH
-BSCVCCSCCVCSCCCACS----

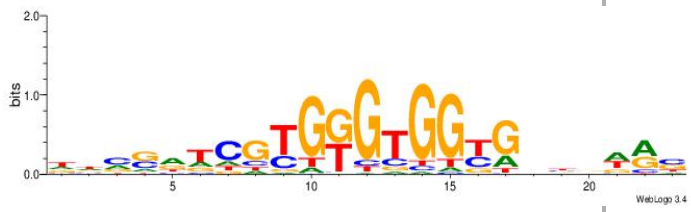
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH

Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV





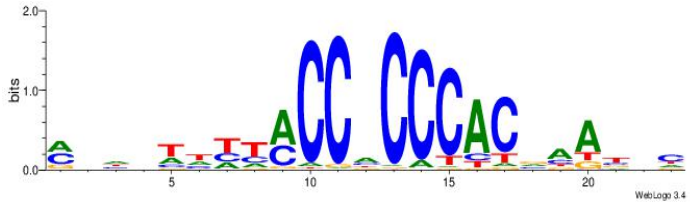
Motif ID:	UP00538
Motif name:	Gli1_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	18
Similarity score:	0.0475246

Alignment:

```
MHHHWHYTMCCHCCCACVAABVH
BSCVCCSCCVCSCCCACS-----
```

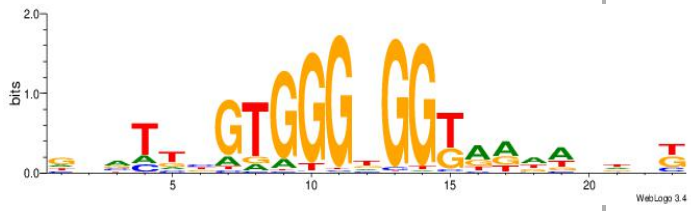
Original motif

Consensus sequence: MHHHWHYTMCCHCCCACVAABVH



Reverse complement motif

Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY



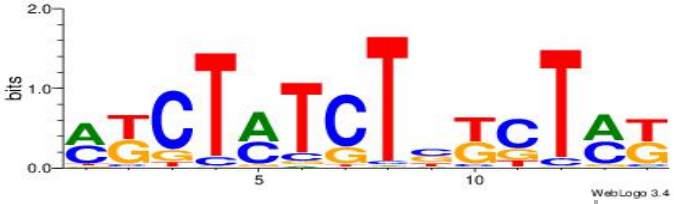
Dataset #: 1 Motif ID: 21 Motif name: C021

Original motif

Consensus sequence: MKAGMVAGAKAGMK

Reverse complement motif

Consensus sequence: RYCTRTCTVYCTRY



Best Matches for Motif ID 21 (Highest to Lowest)

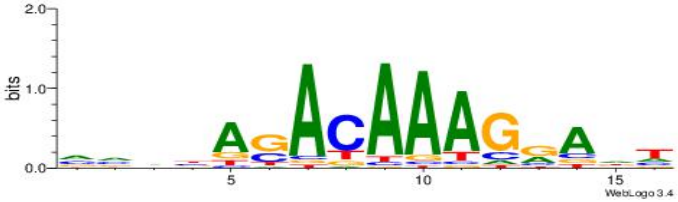
Motif ID:	UP00101
Motif name:	Sox12_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0269394

Alignment:

```
HDTMCTTTGTSTVDBB
--RYCTRTCTVYCTRY
```

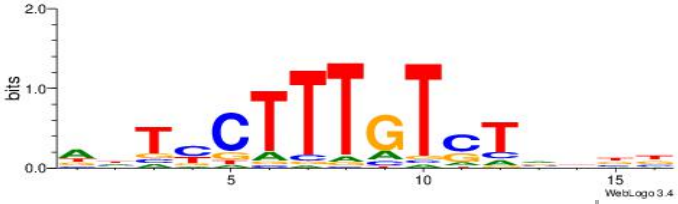
Original motif

Consensus sequence: VVDBASACAAAGRADH



Reverse complement motif

Consensus sequence: HDTMCTTTGTSTVDBB



Motif ID:	>UP00011
Motif name:	Irf6_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:	0.0331495

Alignment:

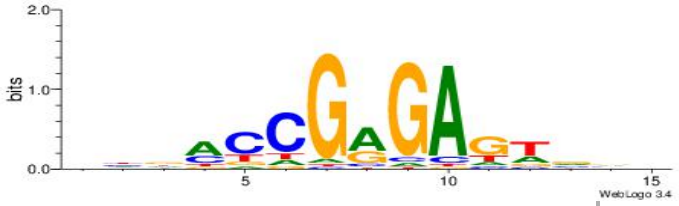
```
VDDRCCGMGAGTBBB
-MKAGMVAGAKAGMK
```

Original motif

Consensus sequence: VBBACTCYCGGKHDV

Reverse complement motif

Consensus sequence: VDDRCCGMGAGTBBB

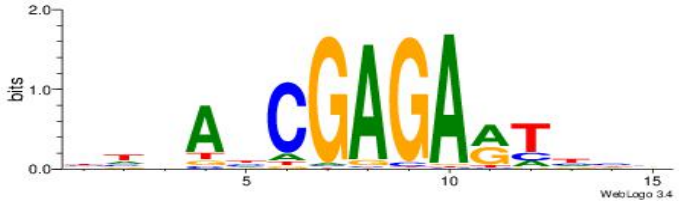


Motif ID:	UP00040
Motif name:	Irf5_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2

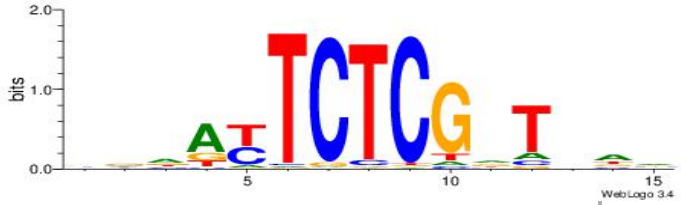
Number of overlap: 14
Similarity score: 0.0341976

Alignment:
BHDAHCGAGARTHBV
-MKAGMVAGAKAGMK

Original motif
Consensus sequence: BHDAHCGAGARTHBV



Reverse complement motif
Consensus sequence: VBHAKTCTCGHTHHV



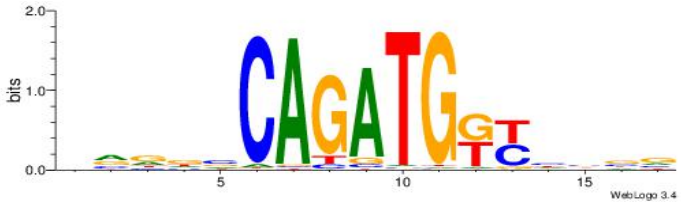
Motif ID: UP00046
Motif name: Tcfe2a_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 14
Similarity score: 0.0359613

Alignment:
HVDDVCAGATGKYHBBV
MKAGMVAGAKAGMK---

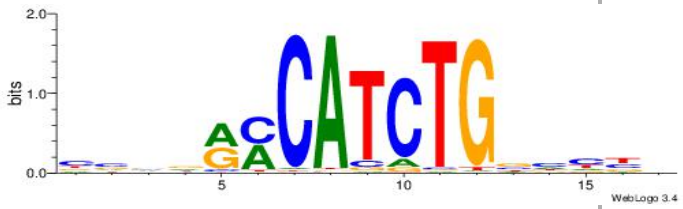
Original motif

Reverse complement motif

Consensus sequence: HVDDVCAGATGKYHBBV



Consensus sequence: VBBDMYCATCTGVHHBH



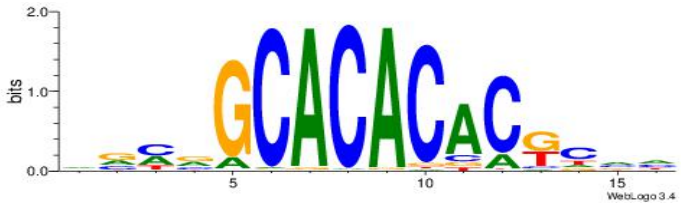
Motif ID:	UP00042
Motif name:	Gm397_second
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	14
Similarity score:	0.0368158

Alignment:

```
HBGYGTGTGTGCVRVD
--RYCTRTCTVYCTRY
```

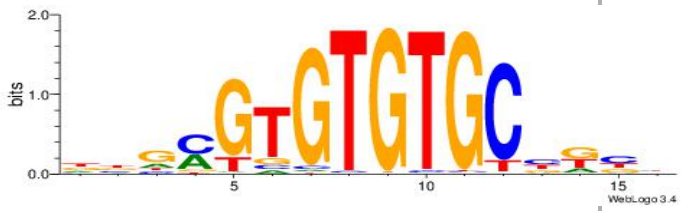
Original motif

Consensus sequence: DVMVGCACACACKCVH



Reverse complement motif

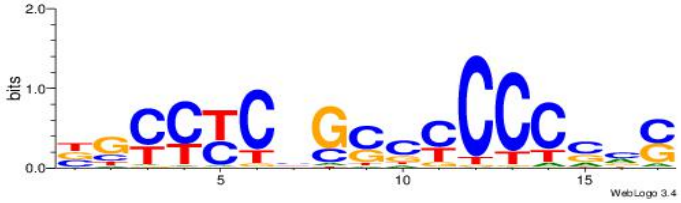
Consensus sequence: HBGYGTGTGTGCVRVD



Dataset #: 1 **Motif ID: 22** **Motif name: C022**

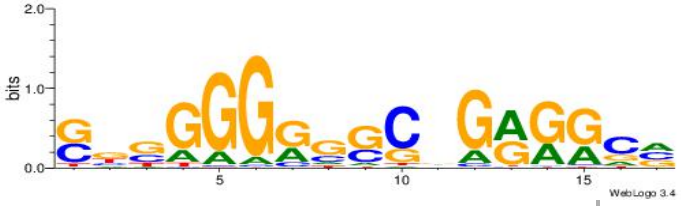
Original motif

Consensus sequence: BGCCYCBGSCYCCCSVS



Reverse complement motif

Consensus sequence: SVSGGGKGSCBGMGGCV



Best Matches for Motif ID 22 (Highest to Lowest)

Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	17
Similarity score:	0.0352062

Alignment:

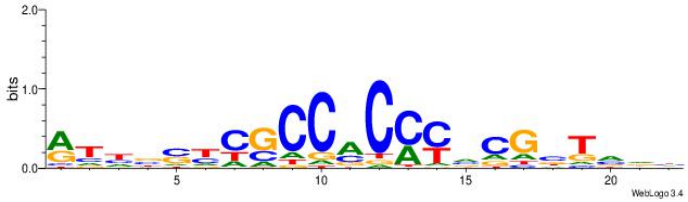
```
RTHBSYCGCCMCMYVCGBTVDH
BGCCYCBGSCYCCCSVS-----
```

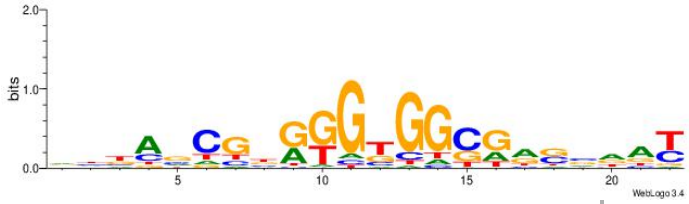
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH

Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK





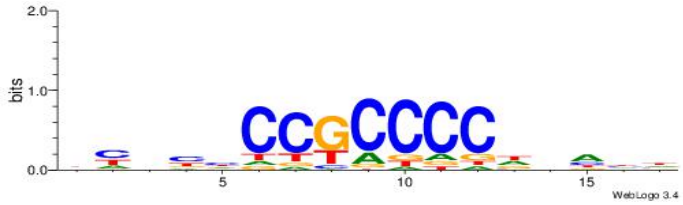
Motif ID:	UP00033
Motif name:	Zfp410_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	17
Similarity score:	0.0384374

Alignment:

```
BHHBHCCGCCCCDHHHH
BGCCYCBGSCYCCCSVS
```

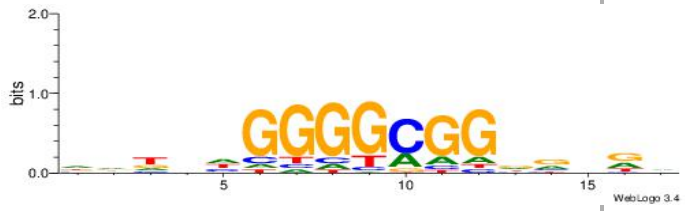
Original motif

Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif

Consensus sequence: HHHHDGGGGCGGDBHDV



Motif ID:	UP00538

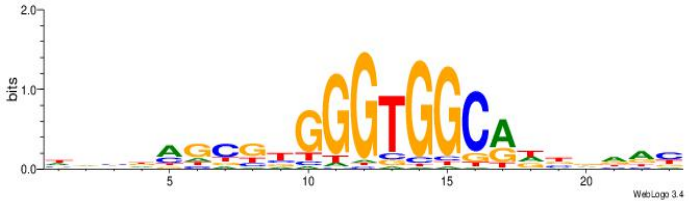
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	7
Number of overlap:	17
Similarity score:	0.0394824

Alignment:

```
HVBDAGCGBGGGTGGCRDBDDDB
------SVSGGGKGSCBGMGGCV
```

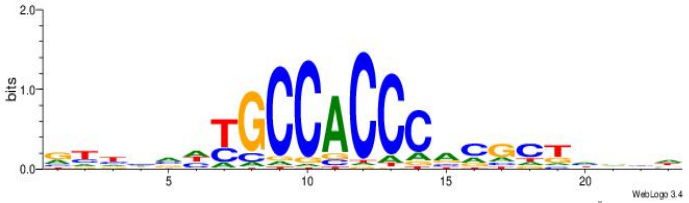
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH

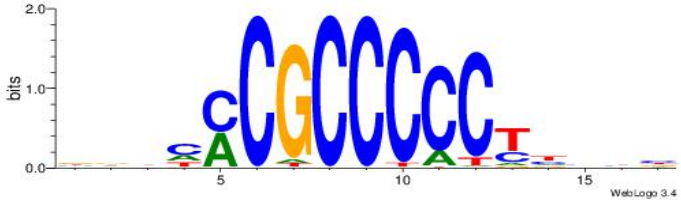


Motif ID:	UP00002
Motif name:	Sp4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	17

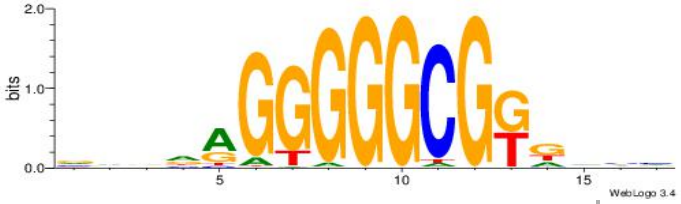
Similarity score: 0.0470502

Alignment:
BDHHMCGCCCCCTHVBB
BGCCYCBGSCYCCCSVS

Original motif
Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif
Consensus sequence: BVVHAGGGGGCGRDHHB

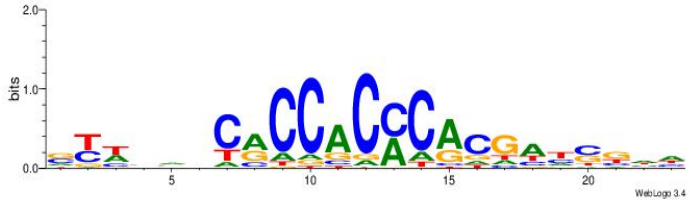


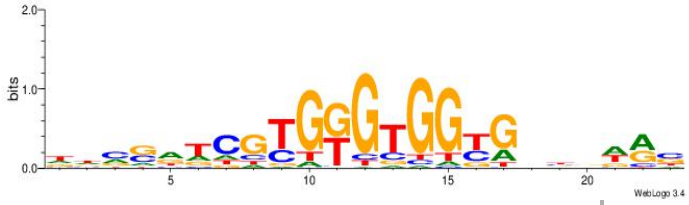
Motif ID: UP00540
Motif name: Gli3_v016060_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 7
Number of overlap: 17
Similarity score: 0.0477827

Alignment:
HHBSHTCGTGRGTGGKGDBVWMV
------SVSGGGKGSCBGMGGCV

Original motif
Consensus sequence: VYWVVHCRCCACMCACGAHSBHH

Reverse complement motif
Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV

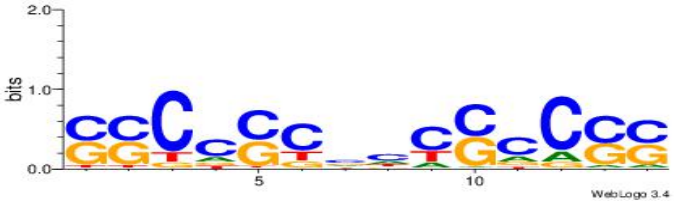




Dataset #: 1 **Motif ID: 23** **Motif name: C023**

Original motif

Consensus sequence: SSCCSCBHCSCCSS



Reverse complement motif

Consensus sequence: SSGGSGDBGSGGSS

Best Matches for Motif ID 23 (Highest to Lowest)

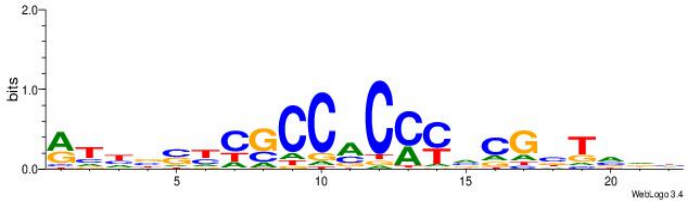
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	14
Similarity score:	0.0233667

Alignment:

RTHBSYCGCCMCMYVCGBTVDH
---SSCCSCBHCSCCSS-----

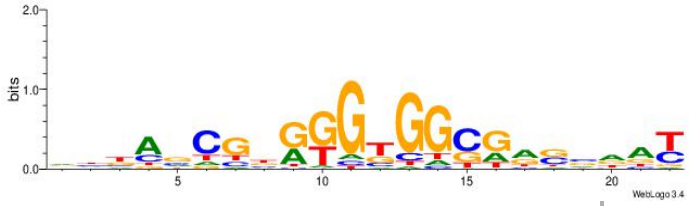
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



Motif ID:	UP00099
Motif name:	Ascl2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	14
Similarity score:	0.0308308

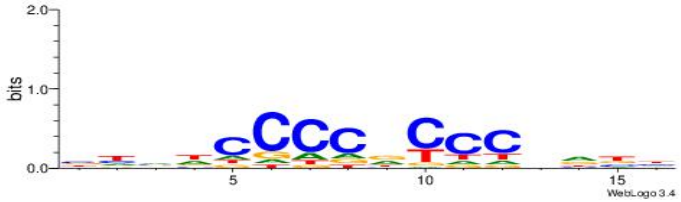
Alignment:
HVDVGGGHGGGGDBHB
SSGGSGDBGSGGSS--

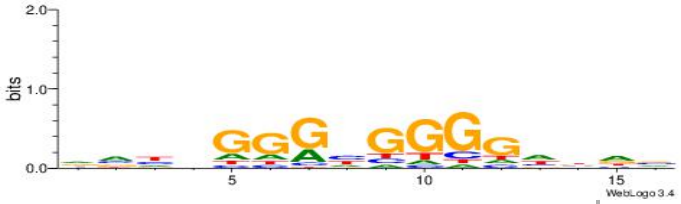
Original motif

Consensus sequence: BHVDCCCCDCCCBDBH

Reverse complement motif

Consensus sequence: HVDVGGGHGGGGDBHB





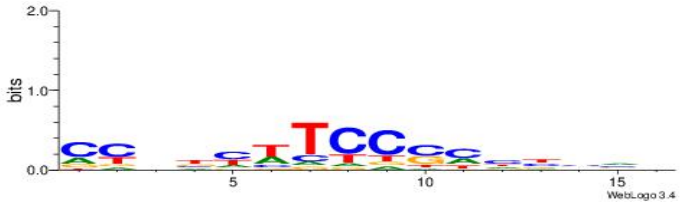
Motif ID:	UP00013
Motif name:	Gabpa_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	14
Similarity score:	0.0321962

Alignment:

```
DBVVDRSGGAWKVHKG
--SSGGSGDBGSGGSS
```

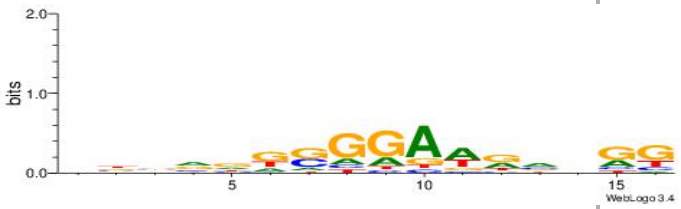
Original motif

Consensus sequence: CYDBYWTCCSMHBVVH



Reverse complement motif

Consensus sequence: DBVVDRSGGAWKVHKG



Motif ID:	UP00021

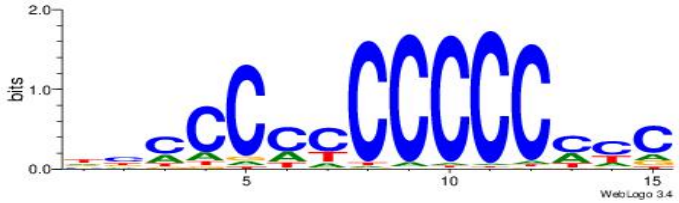
Motif name:	Zfp281_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0322741

Alignment:

```
GKRGGGGGGGGGGBD
-SSGGSGDBGSGGSS
```

Original motif

Consensus sequence: DBCCCCCCCCCCMYC



Reverse complement motif

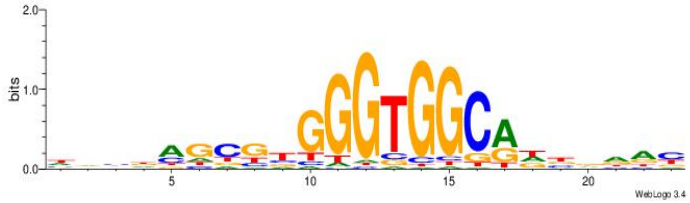
Consensus sequence: GKRGGGGGGGGGGBD

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:	3
Number of overlap:	14

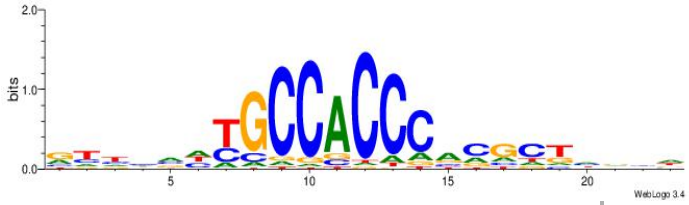
Similarity score: 0.0324541

Alignment:
BDDHVDKGCCACCCVCGCTDBVH
-------SSCCSCBHCSCCSS--

Original motif
Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB

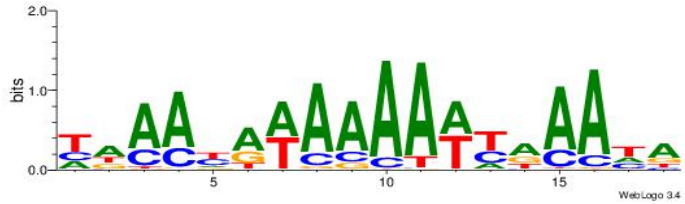


Reverse complement motif
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH

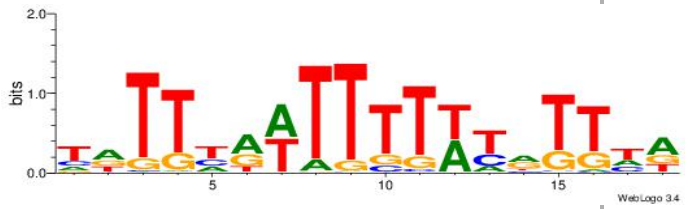


Dataset #: 1 Motif ID: 24 Motif name: C024

Original motif
Consensus sequence: TDAAYRWAAAAWYDAAHA



Reverse complement motif
Consensus sequence: THTTDMWTTTTWKMTTDA



Best Matches for Motif ID 24 (Highest to Lowest)

Motif ID:	UP00034
Motif name:	Sox7_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement

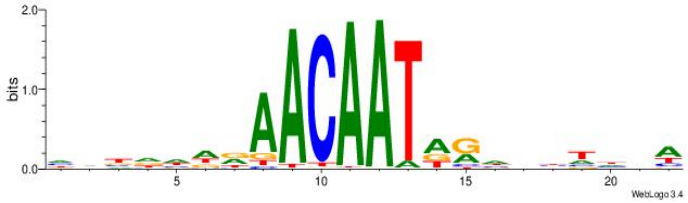
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	18
Similarity score:	0.0410905

Alignment:

```
WBHHHHHMDATTGTTHDHDVHH
--THTTDMWTTTTWKMTTDA--
```

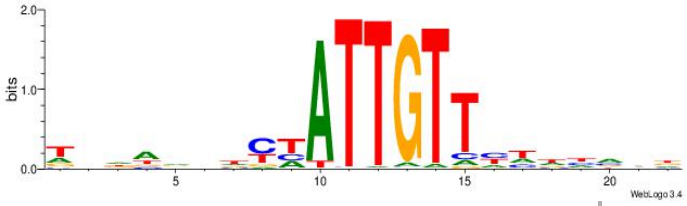
Original motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW



Reverse complement motif

Consensus sequence: WBHHHHHMDATTGTTHDHDVHH



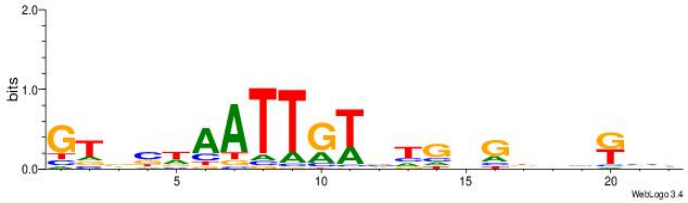
Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	18
Similarity score:	0.0441479

Alignment:

VVYDDDCHCAVACAATTDBVAC
----TDAAYRWAAAAWYDAAHA

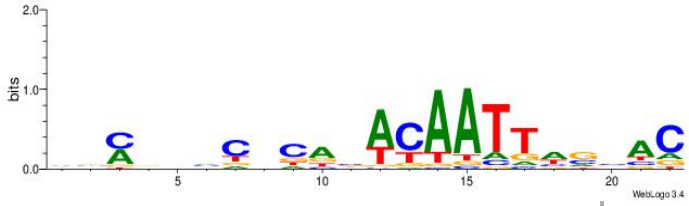
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif

Consensus sequence: VVYDDDCHCAVACAATTDBVAC



Motif ID:	UP00032
Motif name:	Gata3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	18
Similarity score:	0.0508186

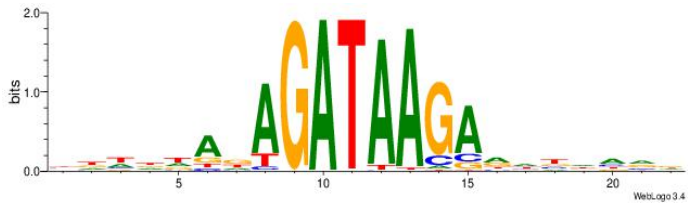
Alignment:
HBHDVHDTCTTATCTHTDDHDV
THTTDMWTTTTWKMTTDA----

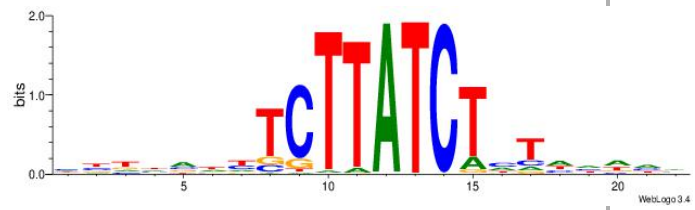
Original motif

Consensus sequence: BDHDDADAGATAAGADHBDHVD

Reverse complement motif

Consensus sequence: HBHDVHDTCTTATCTHTDDHDV





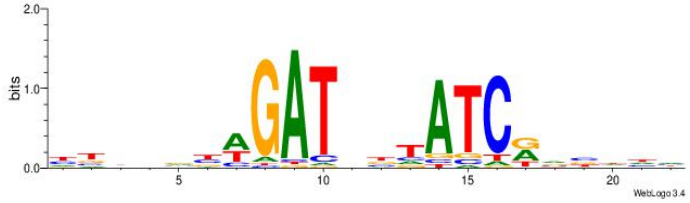
Motif ID:	UP00032
Motif name:	Gata3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	18
Similarity score:	0.0546986

Alignment:

```
HHHBBMGATAVHATCWVVDHVH
--TDAAYRWAAAAWYDAAHA--
```

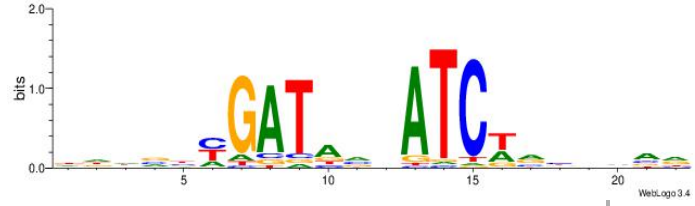
Original motif

Consensus sequence: HBHDVBWGATHBTATCRVBHHH



Reverse complement motif

Consensus sequence: HHHBBMGATAVHATCWVVDHVH



Motif ID:	UP00528

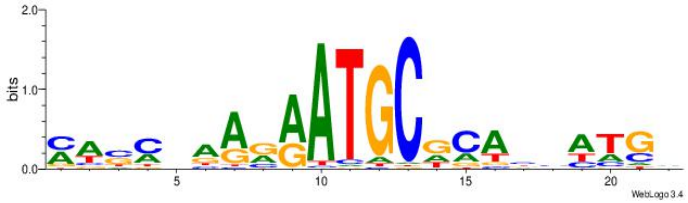
Motif name:	Foxm1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	18
Similarity score:	0.0553

Alignment:

```
MWSMBAARRATGCDCABHATGD
TDAAYRWAAAAWYDAAHA----
```

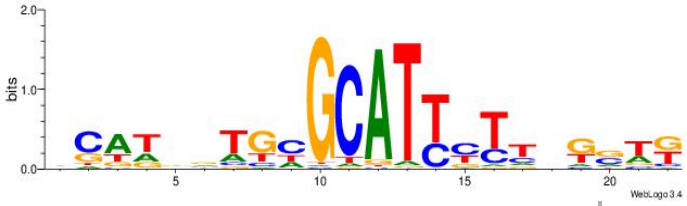
Original motif

Consensus sequence: MWSMBAARRATGCDCABHATGD



Reverse complement motif

Consensus sequence: DCATDBTGHGCATKMTTBRSWR



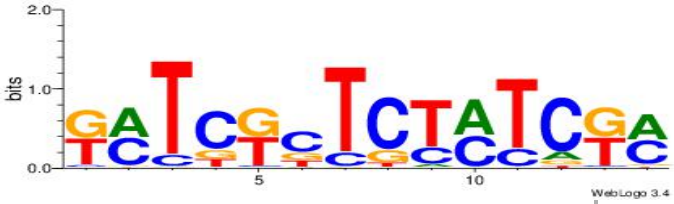
Dataset #: 1 Motif ID: 25 Motif name: C025

Original motif

Consensus sequence: KMGAKAGAGMGAKM

Reverse complement motif

Consensus sequence: RRTCRCTCTRTCRR



Best Matches for Motif ID 25 (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:	4
Number of overlap:	14
Similarity score:	0.036512

Alignment:

```
VVBHRAGATATCWDHBB
RRTCRCTCTRTCRR---
```

Original motif

Consensus sequence: VVBHRAGATATCWDHBB

Reverse complement motif

Consensus sequence: VVHHWGATATCTMHBBV

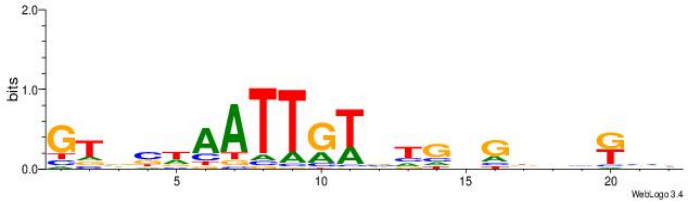
Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	14
Similarity score:	0.0377627

Alignment:

```
VVYDDDCHCAVACAATTDBVAC
-----RRTCRCTCTRTCRR---
```

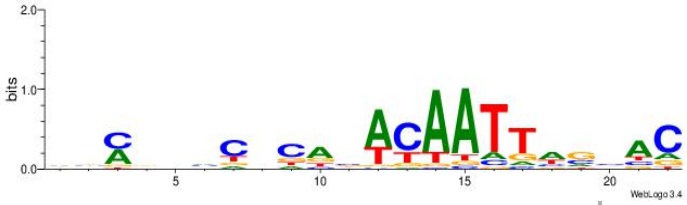
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif

Consensus sequence: VVYDDDCHCAVACAATTDBVAC

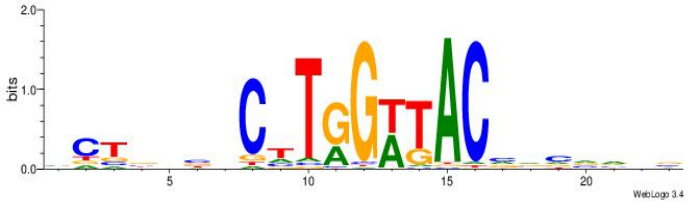


Motif ID:	UP00098
Motif name:	Rfx3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	10

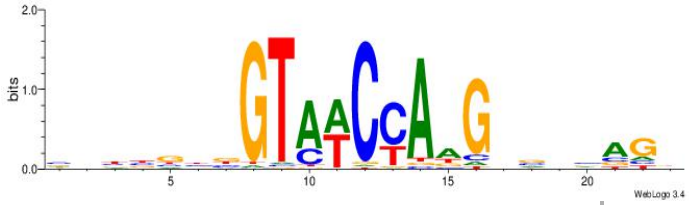
Number of overlap: 14
Similarity score: 0.0384238

Alignment:
VCTBHBVCTTGGWTACVVVVVDB
---------KMGAKAGAGMGAKM

Original motif
Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB



Reverse complement motif
Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB



Motif ID: UP00100
Motif name: Gata6_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: 14
Similarity score: 0.0394703

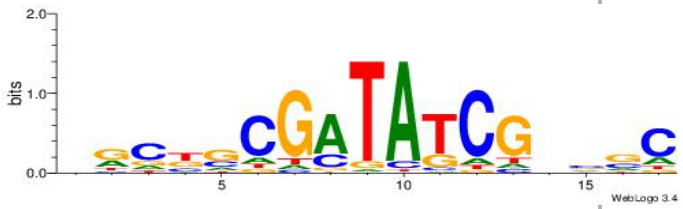
Alignment:
HKCBSCGATATCGVBBC
RRTCRCTCTRTCRR---

Original motif

Reverse complement motif

Consensus sequence: GBBVCGATATCGSVGYD

Consensus sequence: HKCBSCGATATCGVBBC



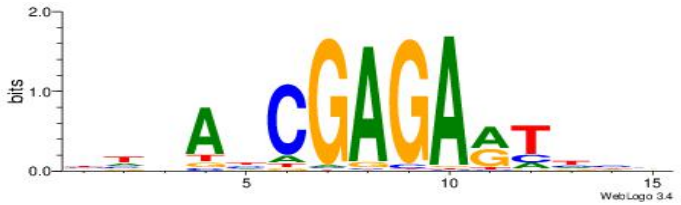
Motif ID:	UP00040
Motif name:	Irf5_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0405383

Alignment:

```
BHDAHCGAGARTHBV
KMGAKAGAGMGAKM-
```

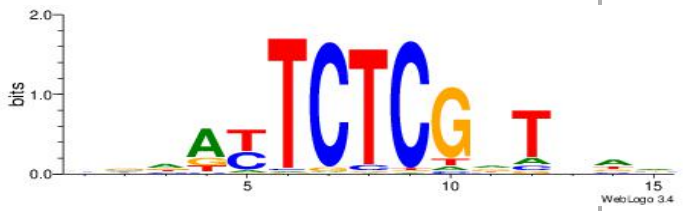
Original motif

Consensus sequence: BHDAHCGAGARTHBV



Reverse complement motif

Consensus sequence: VBHAKTCTCGHTHHV



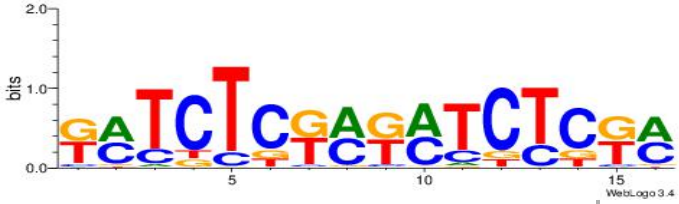
Dataset #: 1 **Motif ID: 26** **Motif name: C026**

Original motif

Consensus sequence: KMGAGAKMKMGAGAKM

Reverse complement motif

Consensus sequence: RRTCTCRRRRTCTCRR



Best Matches for Motif ID 26 (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:	1
Number of overlap:	16
Similarity score:	0.0454643

Alignment:

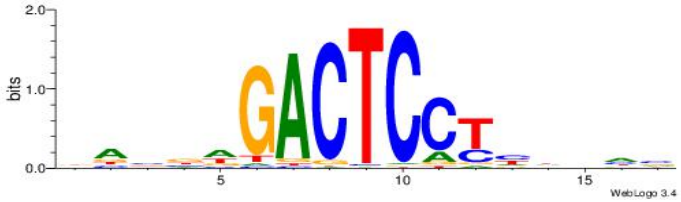
```
VHBDDAGGAGTCWBBTD
RRTCTCRRRRTCTCRR-
```

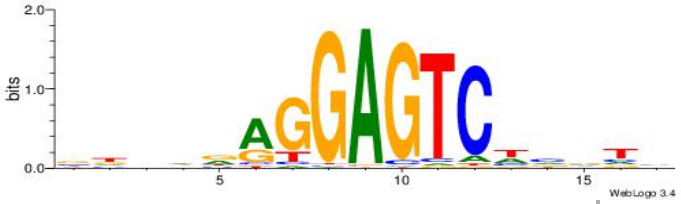
Original motif

Consensus sequence: DABBWGACTCCTHDVHV

Reverse complement motif

Consensus sequence: VHBDDAGGAGTCWBBTD





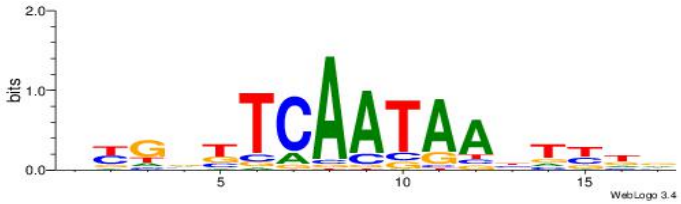
Motif ID:	UP00037
Motif name:	Zfp105_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	16
Similarity score:	0.0459821

Alignment:

```
HDMAVTTATTGARVCMH
KMGAGAKMKMGAGAKM-
```

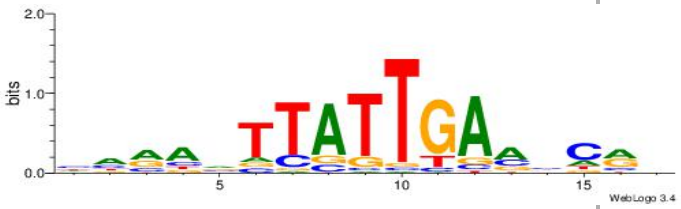
Original motif

Consensus sequence: DYGVKTCAATAABTYDD



Reverse complement motif

Consensus sequence: HDMAVTTATTGARVCMH



Motif ID:	UP00098

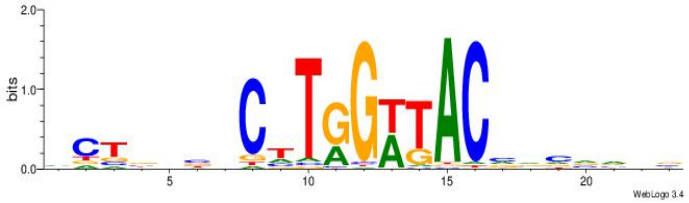
Motif name:	Rfx3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	16
Similarity score:	0.0470026

Alignment:

```
BDBBVBVGTAWCCAAGVBHBAGB
------RRTCTCRRRRTCTCRR-
```

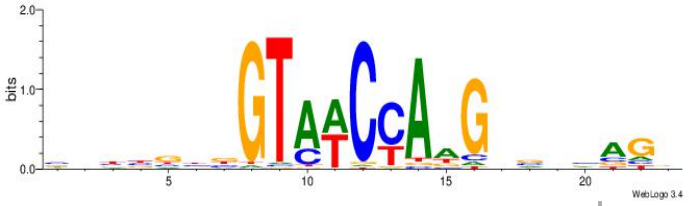
Original motif

Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB



Reverse complement motif

Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB

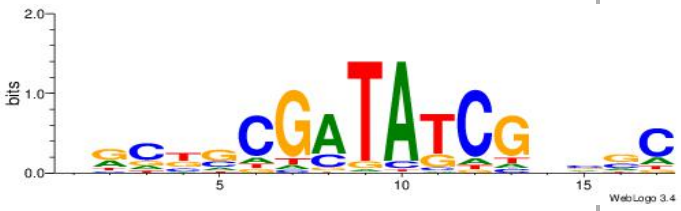


Motif ID:	UP00100
Motif name:	Gata6_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	16
Similarity score:	0.0472484

Alignment:
HKCBSCGATATCGVBBC
RRTCTCRRRRTCTCRR-

Original motif
Consensus sequence: GBBVCGATATCGSVGYD

Reverse complement motif
Consensus sequence: HKCBSCGATATCGVBBC



Motif ID:	UP00080
Motif name:	Gata5_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:	16
Similarity score:	0.0489582

Alignment:
VVHHWGATATCTMHBBV
-KMGAGAKMKMGAGAKM

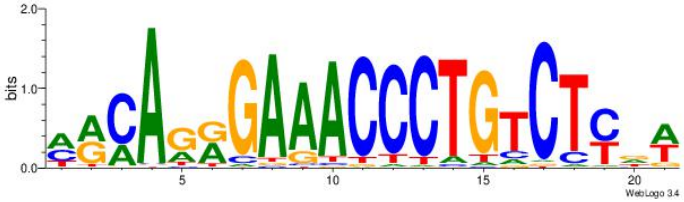
Original motif
Consensus sequence: VVBHRAGATATCWDHBB

Reverse complement motif
Consensus sequence: VVHHWGATATCTMHBBV

Dataset #: 1 Motif ID: 27 Motif name: C027

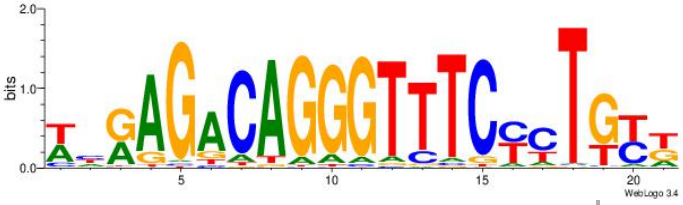
Original motif

Consensus sequence: MRCAGRGAAACCCTGTCTYDW



Reverse complement motif

Consensus sequence: WHKAGACAGGGTTTCMCTGKY



Best Matches for Motif ID 27 (Highest to Lowest)

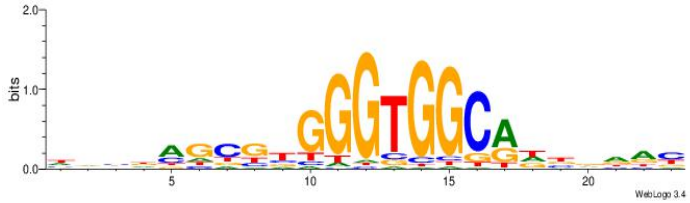
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	21
Similarity score:	0.0379369

Alignment:

HVBDAGCGBGGGTGGCRDBDDDB
-WHKAGACAGGGTTTCMCTGKY-

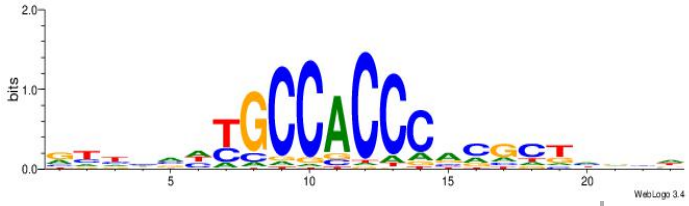
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	21
Similarity score:	0.0428251

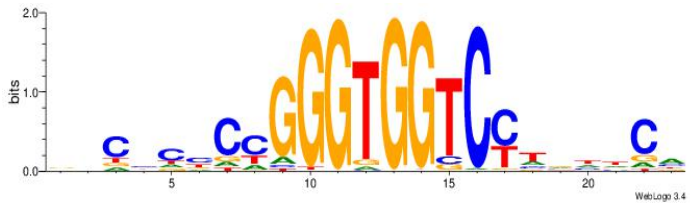
Alignment:
HGDHVHKGACCACCCGGBGBGDB
--MRCAGRGAAACCCTGTCTYDW

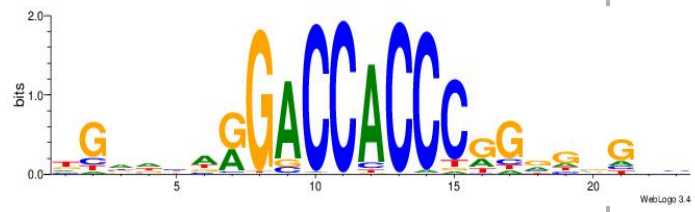
Original motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH

Reverse complement motif

Consensus sequence: HGDHVHKGACCACCCGGBGBGDB

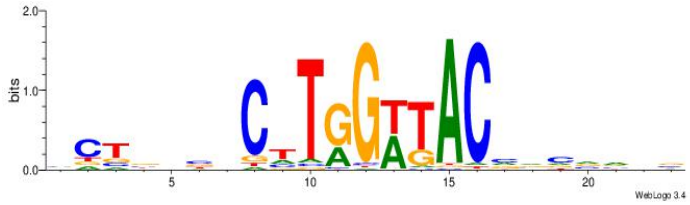




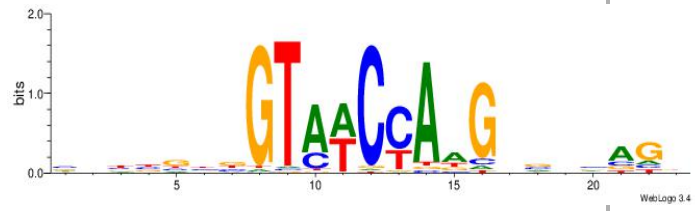
Motif ID:	UP00098
Motif name:	Rfx3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	21
Similarity score:	0.0432221

Alignment:
VCTBHBVCTTGGWTACVVVVVDB
-WHKAGACAGGGTTTCMCTGKY-

Original motif
Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB



Reverse complement motif
Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB



Motif ID:	UP00539

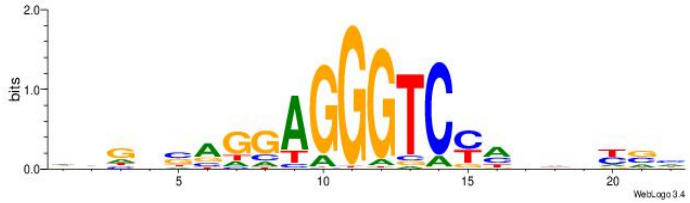
Motif name:	Gli2_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	21
Similarity score:	0.0454185

Alignment:

```
DVMHHDHKGACCCTCCTSVCBH
MRCAGRGAAACCCTGTCTYDW-
```

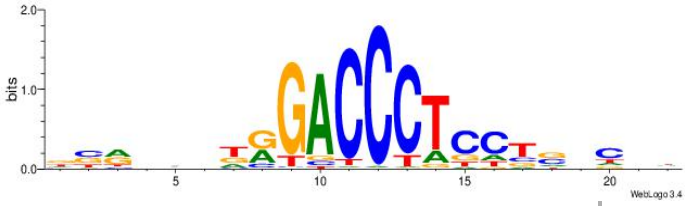
Original motif

Consensus sequence: HVGVSAGGAGGGTCYHHHHYVH



Reverse complement motif

Consensus sequence: DVMHHDHKGACCCTCCTSVCBH

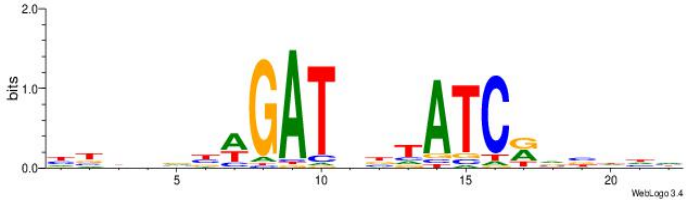


Motif ID:	UP00032
Motif name:	Gata3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	21

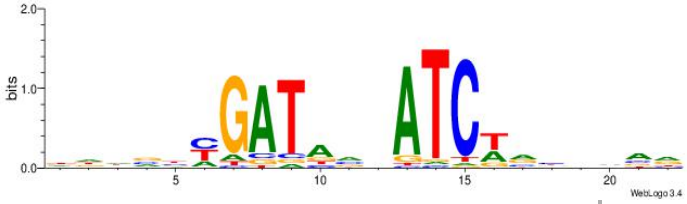
Similarity score: 0.0491194

Alignment:
HBHDVBWGATHBTATCRVBHHH
-WHKAGACAGGGTTTCMCTGKY

Original motif
Consensus sequence: HBHDVBWGATHBTATCRVBHHH

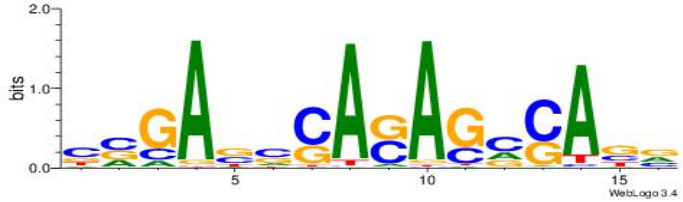


Reverse complement motif
Consensus sequence: HHHBBMGATAVHATCWVVDHVH

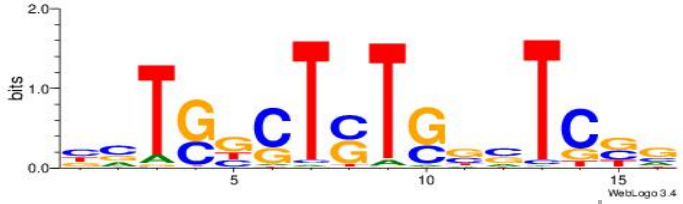


Dataset #: 1 Motif ID: 28 Motif name: C028

Original motif
Consensus sequence: BVGASSCASAGVSABV



Reverse complement motif
Consensus sequence: VBTSVCTSTGSSTCVB



Best Matches for Motif ID 28 (Highest to Lowest)

Motif ID:	UP00000
Motif name:	Smad3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif

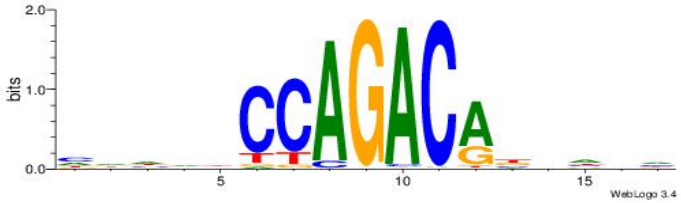
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	16
Similarity score:	0.0351716

Alignment:

```
HDHDDCCAGACABBHVH
BVGASSCASAGVSABV-
```

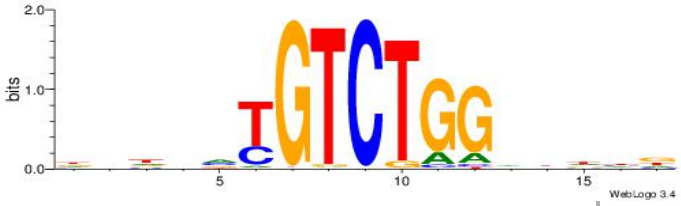
Original motif

Consensus sequence: HDHDDCCAGACABBHVH



Reverse complement motif

Consensus sequence: HVHBVTGTCTGGDDHDD



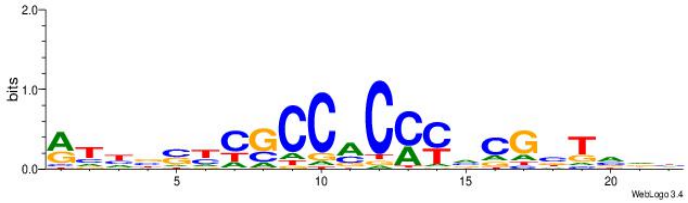
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	16
Similarity score:	0.0393573

Alignment:

RTHBSYCGCCMCMYVCGBTVDH
---BVGASSCASAGVSABV---

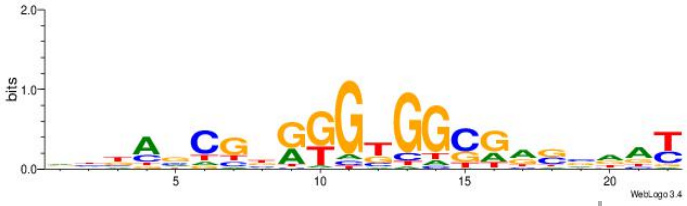
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



Motif ID:	UP00013
Motif name:	Gabpa_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:	16
Similarity score:	0.0397911

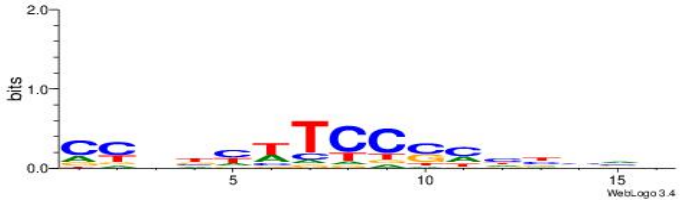
Alignment:
CYDBYWTCCSMHBVVH
VBTSVCTSTGSSTCVB

Original motif

Consensus sequence: CYDBYWTCCSMHBVVH

Reverse complement motif

Consensus sequence: DBVVDRSGGAWKVHKG



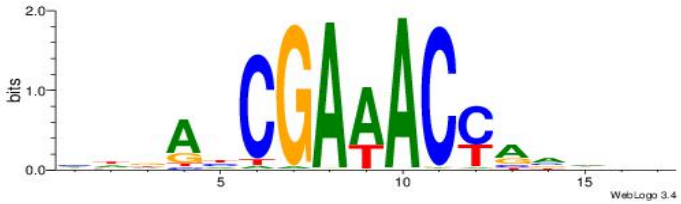
Motif ID:	UP00011
Motif name:	Irf6_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	16
Similarity score:	0.0399886

Alignment:

```
DHDBTKGTTTCGHTHDD
-VBTSVCTSTGSSTCVB
```

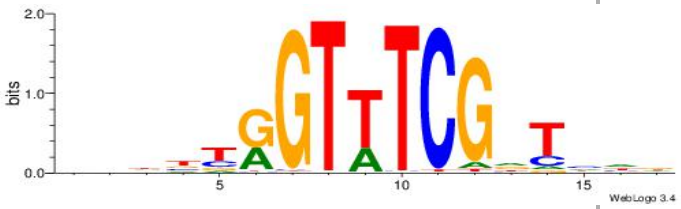
Original motif

Consensus sequence: HDDAHCGAAACYAVDDD



Reverse complement motif

Consensus sequence: DHDBTKGTTTCGHTHDD



Motif ID:	UP00034

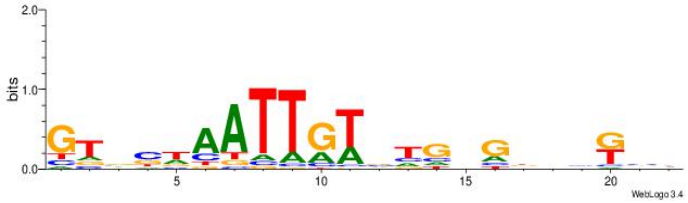
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	16
Similarity score:	0.0408182

Alignment:

```
GTVBDAATTGTVTGHGDDHKVB
--VBTSVCTSTGSSTCVB----
```

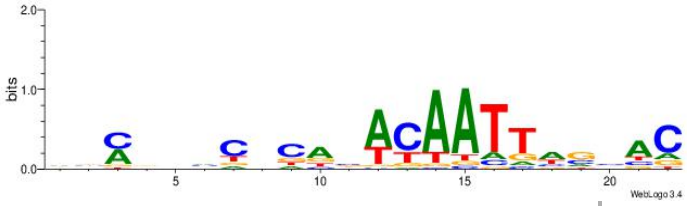
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif

Consensus sequence: VVYDDDCHCAVACAATTDBVAC



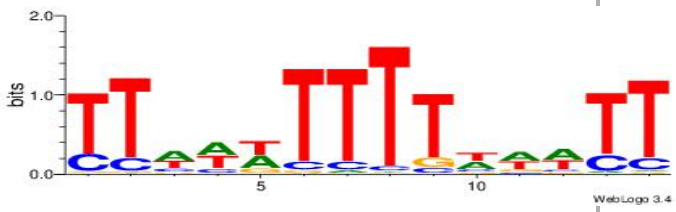
Dataset #: 1 **Motif ID: 29** **Motif name: C029**

Original motif

Consensus sequence: AAWWWAAAAWWWAA

Reverse complement motif

Consensus sequence: TTWWWTTTTWWWTT



Best Matches for Motif ID 29 (Highest to Lowest)

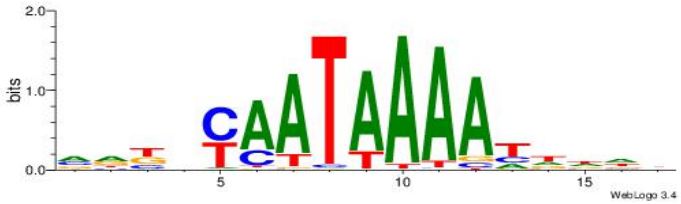
Motif ID:	UP00121
Motif name:	Hoxd10
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	14
Similarity score:	0.0387466

Alignment:

```
HDDDATTTTATTKVRDB
TTWWWTTTTWWWTT---
```

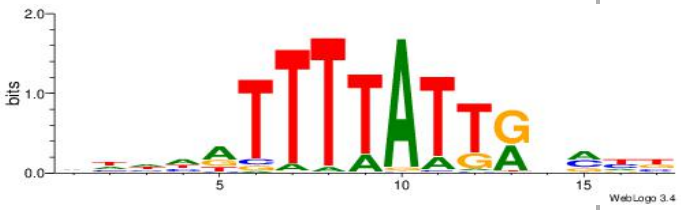
Original motif

Consensus sequence: VDKVYAATAAAATDDDH



Reverse complement motif

Consensus sequence: HDDDATTTTATTKVRDB



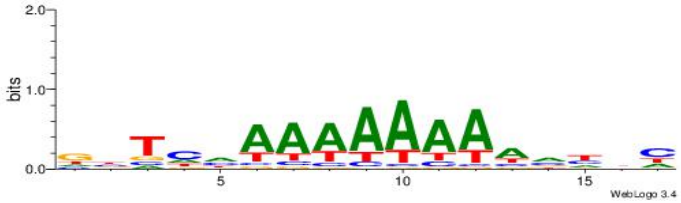
Motif ID:	UP00090
Motif name:	Elf3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	14
Similarity score:	0.0414949

Alignment:

```
DDHBTTTTTTTTHDAVH
TTWWWTTTTWWWTT---
```

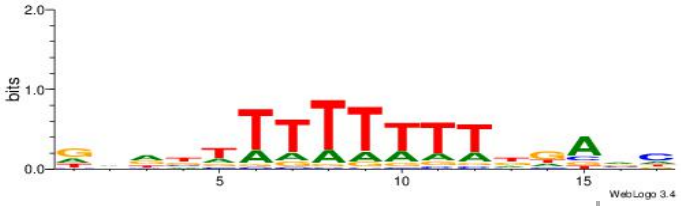
Original motif

Consensus sequence: DBTHHAAAAAAAAVHDH



Reverse complement motif

Consensus sequence: DDHBTTTTTTTTHDAVH

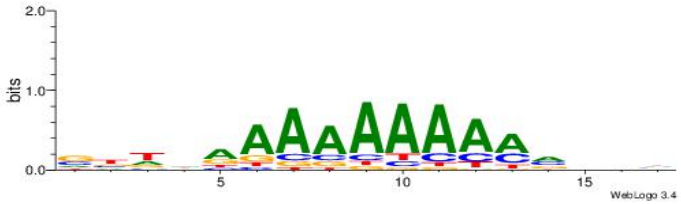


Motif ID:	UP00077
Motif name:	Srf_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14

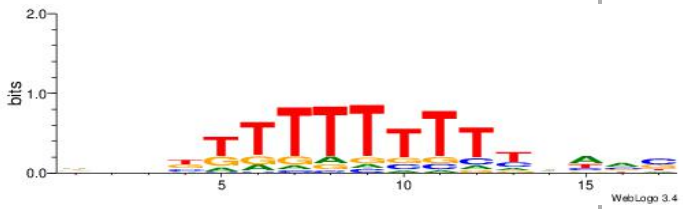
Similarity score: 0.0415039

Alignment:
VBDDAAAAAAAAMVBHH
---AAWWWAAAAWWWAA

Original motif
Consensus sequence: VBDDAAAAAAAAMVBHH



Reverse complement motif
Consensus sequence: HHVBYTTTTTTTTDDVV

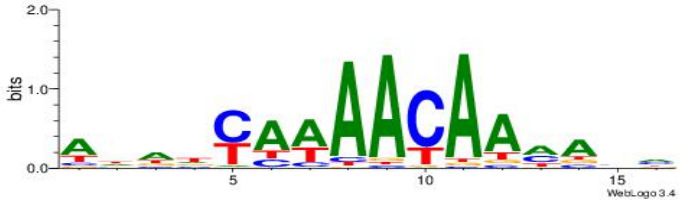


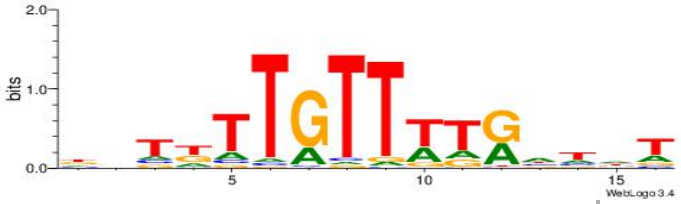
Motif ID:	UP00061
Motif name:	Foxl1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	14
Similarity score:	0.0434847

Alignment:
ADDDYAWAACAAMAHH
AAWWWAAAAWWWAA--

Original motif
Consensus sequence: ADDDYAWAACAAMAHH

Reverse complement motif
Consensus sequence: HDTYTTGTTWTKDDDT





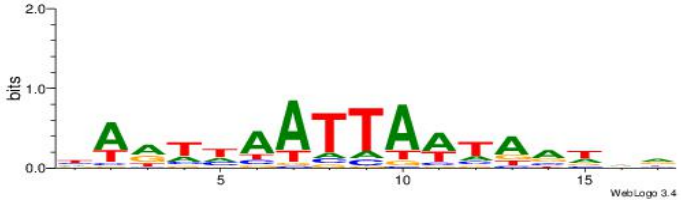
Motif ID:	UP00255
Motif name:	Dbx1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	14
Similarity score:	0.045306

Alignment:

```
HARTHAATTAWTAVDHD
-AAWWWAAAAWWWAA--
```

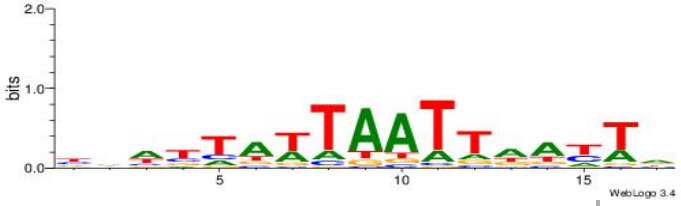
Original motif

Consensus sequence: HARTHAATTAWTAVDHD



Reverse complement motif

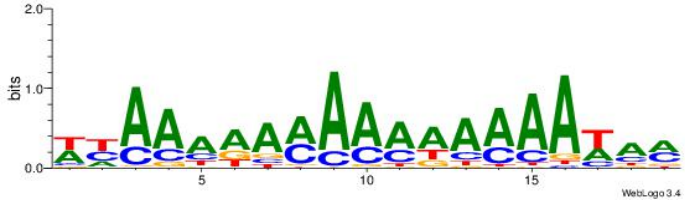
Consensus sequence: DHDBTAWTAATTHAKTH



Dataset #: 1 Motif ID: 30 Motif name: C030

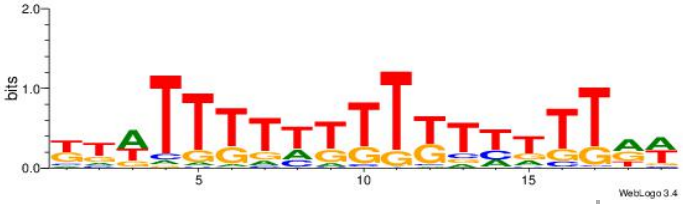
Original motif

Consensus sequence: WYAAAAAMAAAAAAAAWAM



Reverse complement motif

Consensus sequence: YTWTTTTTTTTYTTTTTMW



Best Matches for Motif ID 30 (Highest to Lowest)

Motif ID:	UP00034
Motif name:	Sox7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	19
Similarity score:	0.0369294

Alignment:

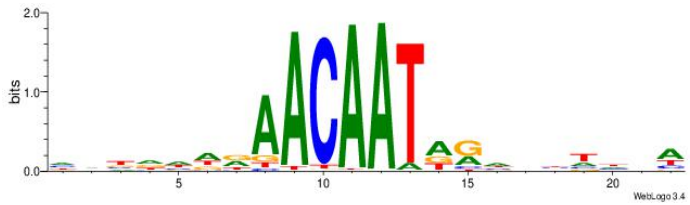
```
HHBDHDDAACAATDRHHHHHBW
--WYAAAAAMAAAAAAAAWAM-
```

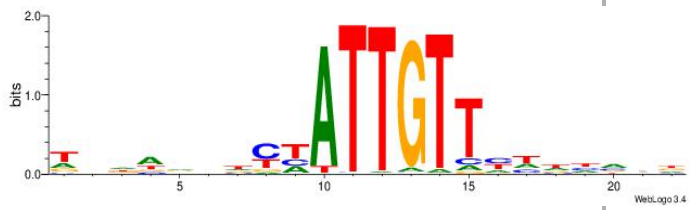
Original motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW

Reverse complement motif

Consensus sequence: WBHHHHHMDATTGTTHDHDVHH





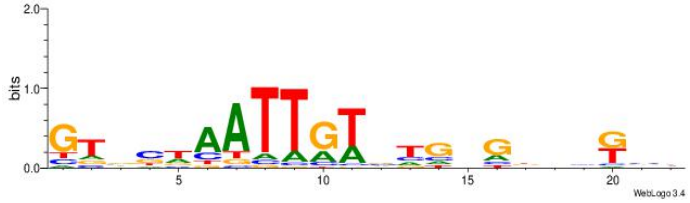
Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	19
Similarity score:	0.0399523

Alignment:

```
GTVBDAATTGTVTGHGDDHKVB
---YTWTTTTTTTTYTTTTTMW
```

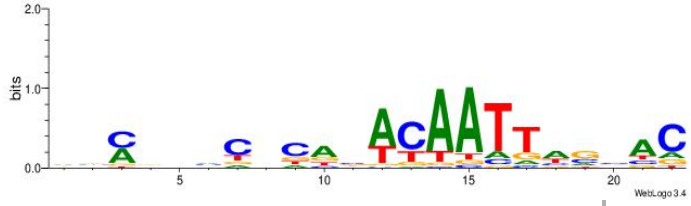
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif

Consensus sequence: VVYDDDCHCAVACAATTDBVAC



Motif ID:	UP00032

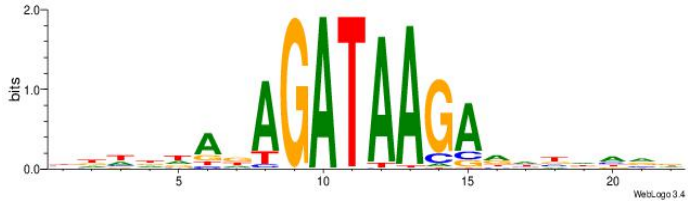
Motif name:	Gata3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	19
Similarity score:	0.0431733

Alignment:

```
HBHDVHDTCTTATCTHTDDHDV
--YTWTTTTTTTTYTTTTTMW-
```

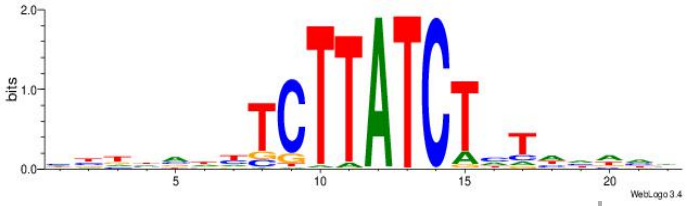
Original motif

Consensus sequence: BDHDDADAGATAAGADHBDHVD



Reverse complement motif

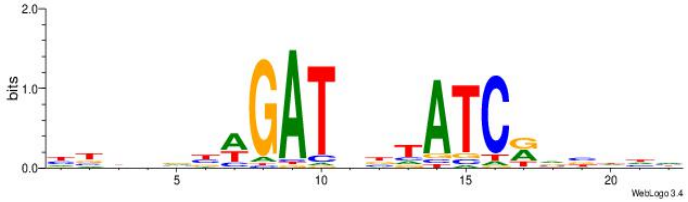
Consensus sequence: HBHDVHDTCTTATCTHTDDHDV



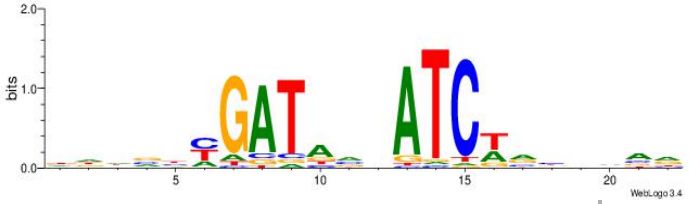
Motif ID:	UP00032
Motif name:	Gata3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	19
Similarity score:	0.0503657

Alignment:
HBHDVBWGATHBTATCRVBHHH
---WYAAAAAMAAAAAAAAWAM

Original motif
Consensus sequence: HBHDVBWGATHBTATCRVBHHH



Reverse complement motif
Consensus sequence: HHHBBMGATAVHATCWVVDHVH

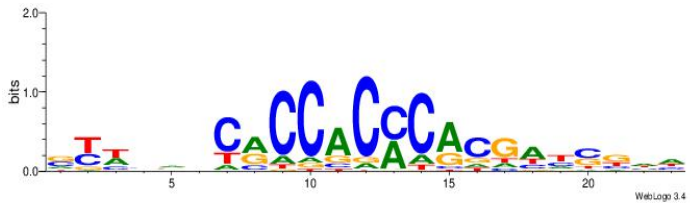


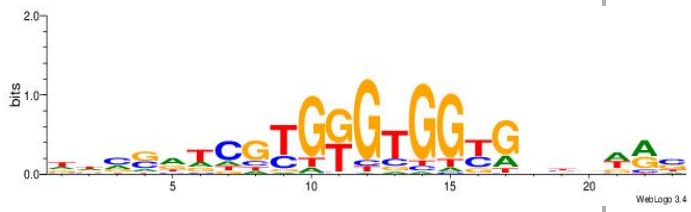
Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	19
Similarity score:	0.0507131

Alignment:
VYWVVHCRCCACMCACGAHSBHH
--WYAAAAAMAAAAAAAAWAM--

Original motif
Consensus sequence: VYWVVHCRCCACMCACGAHSBHH

Reverse complement motif
Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV

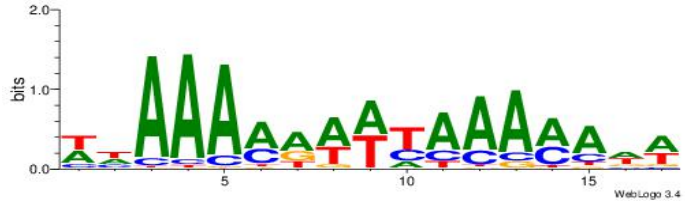




Dataset #: 1 **Motif ID: 31** **Motif name: C031**

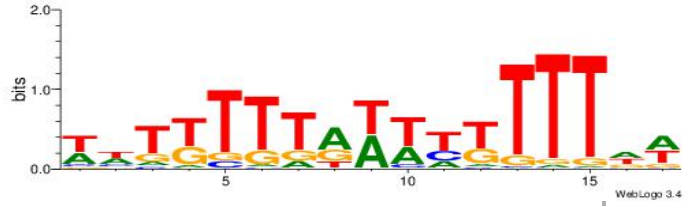
Original motif

Consensus sequence: WHAAAMRWWYAAAMAWW



Reverse complement motif

Consensus sequence: WWTYTTTMWWKYTTTHW



Best Matches for Motif ID 31 (Highest to Lowest)

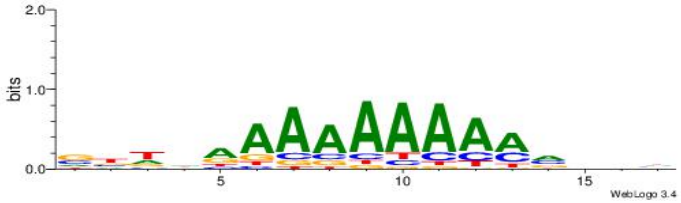
Motif ID:	UP00077
Motif name:	Srf_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	17
Similarity score:	0.0458825

Alignment:

VBDDAAAAAAAAMVBHH
WHAAAMRWWYAAAMAWW

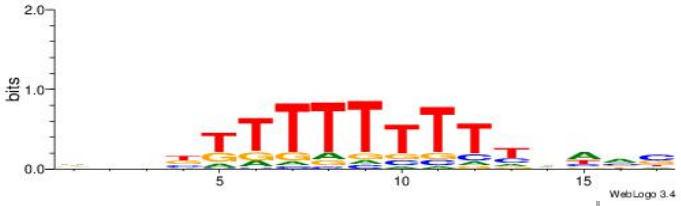
Original motif

Consensus sequence: VBDDAAAAAAAAMVBHH



Reverse complement motif

Consensus sequence: HHVBYTTTTTTTTDDVV



Motif ID:	UP00090
Motif name:	Elf3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	17
Similarity score:	0.0488194

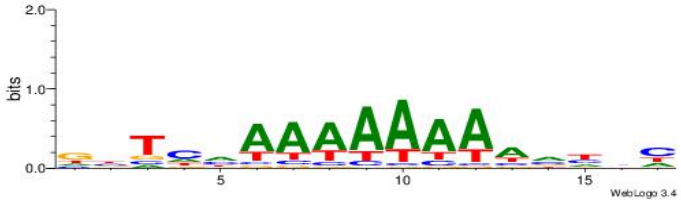
Alignment:
DDHBTTTTTTTTHDAVH
WWTYTTTMWWKYTTTHW

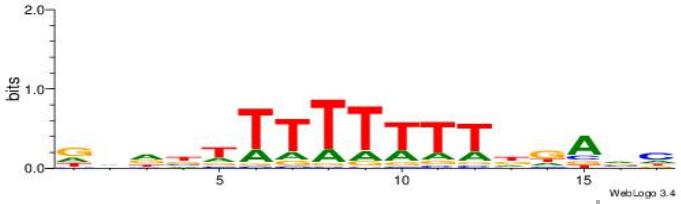
Original motif

Consensus sequence: DBTHHAAAAAAAAVHDH

Reverse complement motif

Consensus sequence: DDHBTTTTTTTTHDAVH





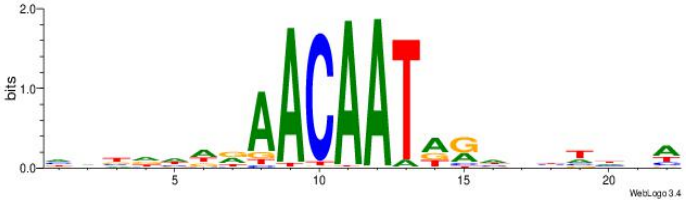
Motif ID:	UP00034
Motif name:	Sox7_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	17
Similarity score:	0.0501404

Alignment:

```
WBHHHHHMDATTGTTHDHDVHH
WWTYTTTMWWKYTTTHW-----
```

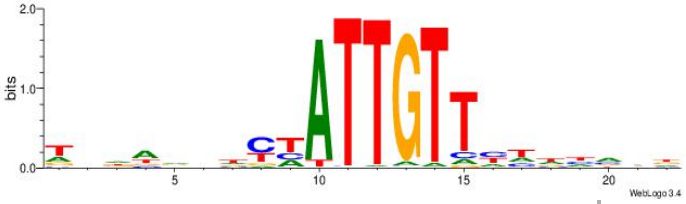
Original motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW



Reverse complement motif

Consensus sequence: WBHHHHHMDATTGTTHDHDVHH



Motif ID:	UP00255

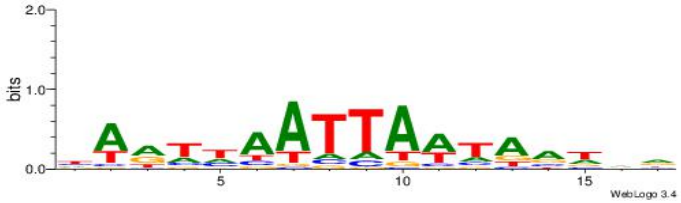
Motif name:	Dbx1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	17
Similarity score:	0.0539477

Alignment:

```
DHDBTAWTAATTHAKTH
WWTYTTTMWWKYTTTHW
```

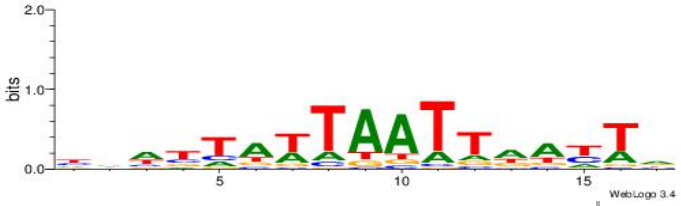
Original motif

Consensus sequence: HARTHAATTAWTAVDHD



Reverse complement motif

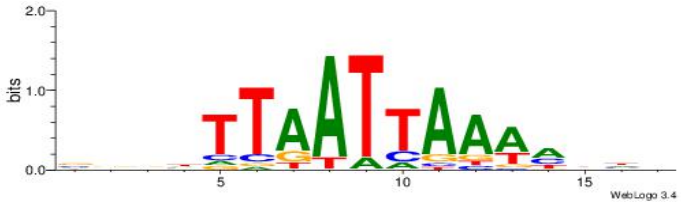
Consensus sequence: DHDBTAWTAATTHAKTH



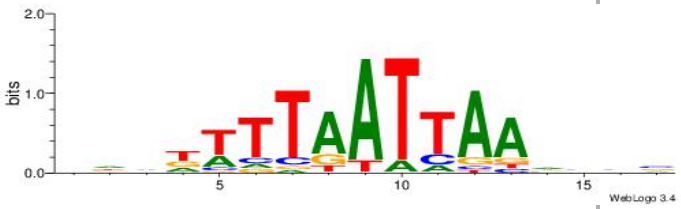
Motif ID:	UP00078
Motif name:	Arid3a_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	17
Similarity score:	0.0545289

Alignment:
DHHYTTTAATTAAHBBV
WWTYTTTMWWKYTTTHW

Original motif
Consensus sequence: VBBHTTAATTAAAMHHH

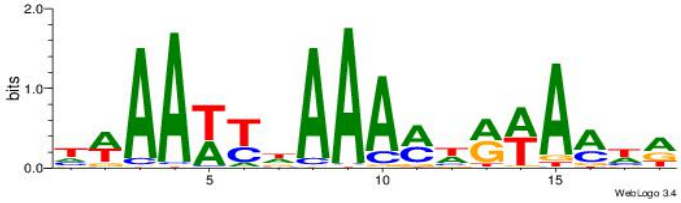


Reverse complement motif
Consensus sequence: DHHYTTTAATTAAHBBV

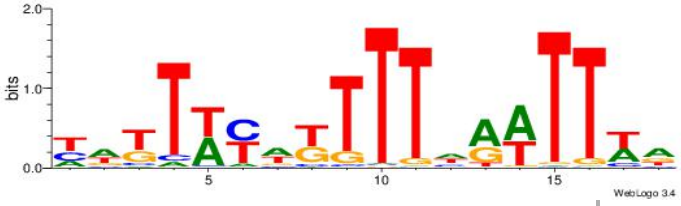


Dataset #: 1 Motif ID: 32 Motif name: C032

Original motif
Consensus sequence: HWAAWYDAAAMWRWAMWR



Reverse complement motif
Consensus sequence: KWYTWKWYTTTDMWTTWH



Best Matches for Motif ID 32 (Highest to Lowest)

Motif ID:	UP00034
Motif name:	Sox7_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement

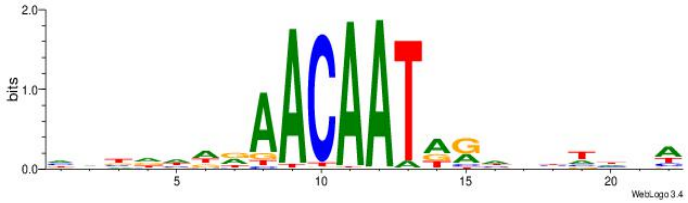
Direction:	Backward
Position number:	2
Number of overlap:	18
Similarity score:	0.0461423

Alignment:

```
WBHHHHHMDATTGTTHDHDVHH
---KWYTWKWYTTTDMWTTWH-
```

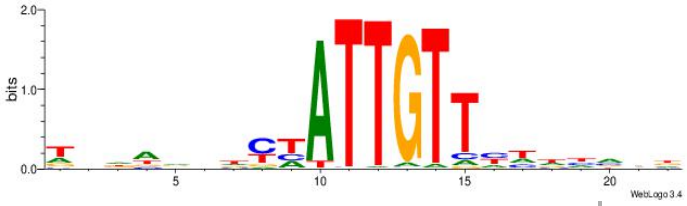
Original motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW



Reverse complement motif

Consensus sequence: WBHHHHHMDATTGTTHDHDVHH



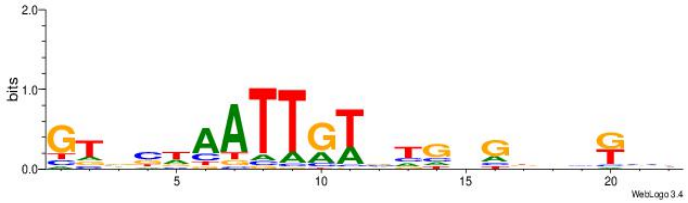
Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	18
Similarity score:	0.050828

Alignment:

GTVBDAATTGTVTGHGDDHKVB
---HWAAWYDAAAMWRWAMWR-

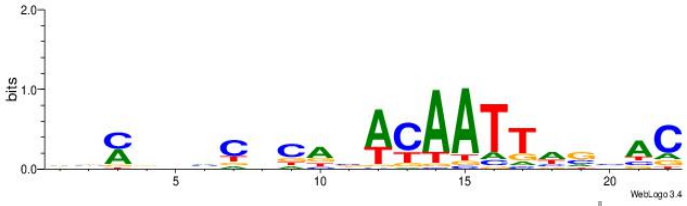
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif

Consensus sequence: VVYDDDCHCAVACAATTDBVAC



Motif ID:	UP00032
Motif name:	Gata3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	18
Similarity score:	0.0516978

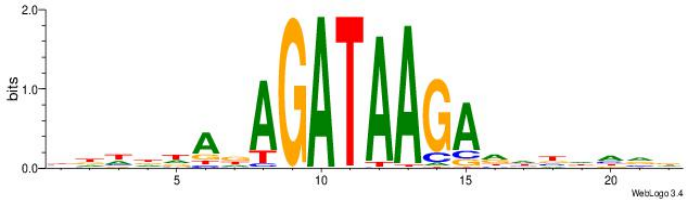
Alignment:
HBHDVHDTCTTATCTHTDDHDV
-KWYTWKWYTTTDMWTTWH---

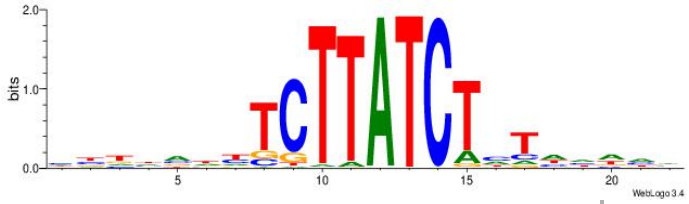
Original motif

Consensus sequence: BDHDDADAGATAAGADHBDHVD

Reverse complement motif

Consensus sequence: HBHDVHDTCTTATCTHTDDHDV





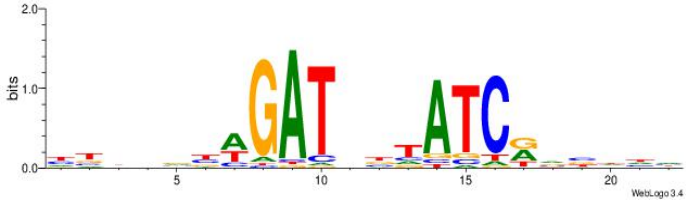
Motif ID:	UP00032
Motif name:	Gata3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	18
Similarity score:	0.0517018

Alignment:

```
HBHDVBWGATHBTATCRVBHHH
----HWAAWYDAAAMWRWAMWR
```

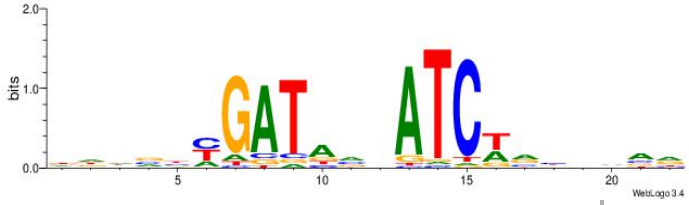
Original motif

Consensus sequence: HBHDVBWGATHBTATCRVBHHH



Reverse complement motif

Consensus sequence: HHHBBMGATAVHATCWVVDHVH



Motif ID:	UP00050
Motif name:	Bhlhb2_secondary

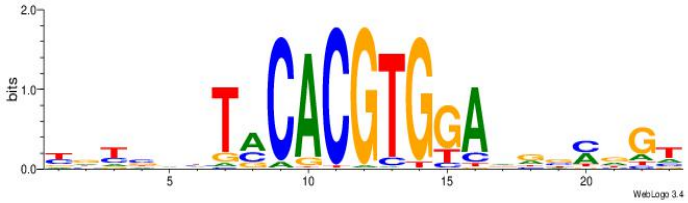
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	18
Similarity score:	0.0667428

Alignment:

```
ACHRBHDTCCACGTGYAHHBMHM
--HWAAWYDAAAMWRWAMWR---
```

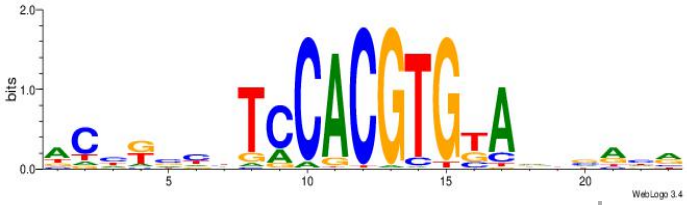
Original motif

Consensus sequence: YDYBDHTMCACGTGGADDBMDGT



Reverse complement motif

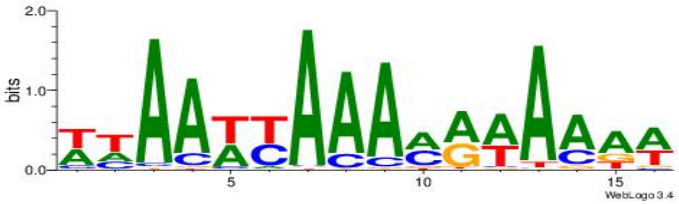
Consensus sequence: ACHRBHDTCCACGTGYAHHBMHM



Dataset #: 1 Motif ID: 33 Motif name: C033

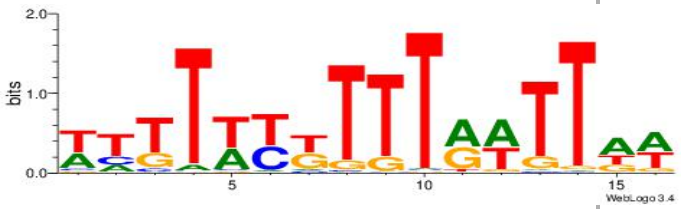
Original motif

Consensus sequence: WWAAWYAAAMRWAAAW



Reverse complement motif

Consensus sequence: WTTTWKYTTTMWTTWW



Best Matches for Motif ID 33 (Highest to Lowest)

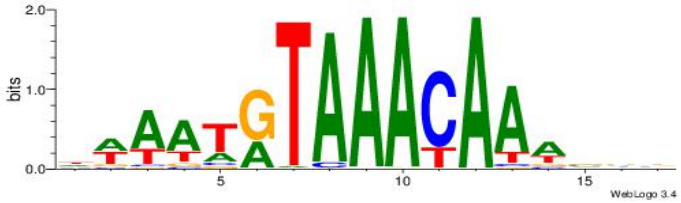
Motif ID:	UP00061
Motif name:	Foxl1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	16
Similarity score:	0.0226221

Alignment:

```
VVVWTTGTTTAMATTWD
-WTTTWKYTTTMWTTWW
```

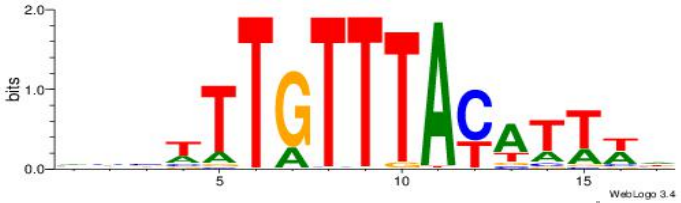
Original motif

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:	2
Number of overlap:	16
Similarity score:	0.0262386

Alignment:

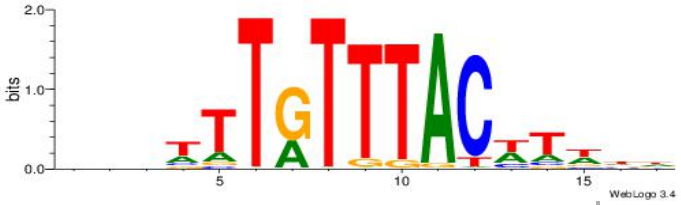
```
BDVTTTKTTTACWTWHH
-WTTTWKYTTTMWTTWW
```

Original motif

Consensus sequence: HHWAWGTAAAYAAAVDB

Reverse complement motif

Consensus sequence: BDVTTTKTTTACWTWHH



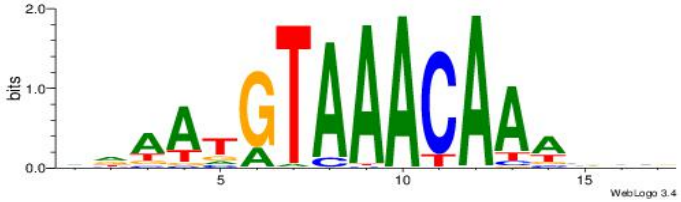
Motif ID:	UP00025
Motif name:	Foxk1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	16
Similarity score:	0.0287316

Alignment:

```
BBVTTTGTTTACATTDD
-WTTTWKYTTTMWTTWW
```

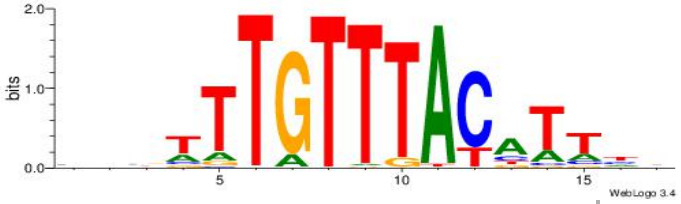
Original motif

Consensus sequence: DDAATGTAAACAAAVVB



Reverse complement motif

Consensus sequence: BBVTTTGTTTACATTDD



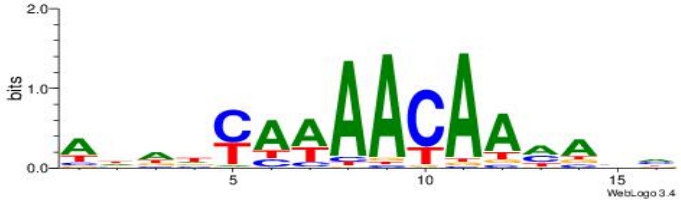
Motif ID:	UP00061
Motif name:	Foxl1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	16
Similarity score:	0.0296838

Alignment:

```
ADDDYAWAACAAMAHH
WWAAWYAAAMRWAAAW
```

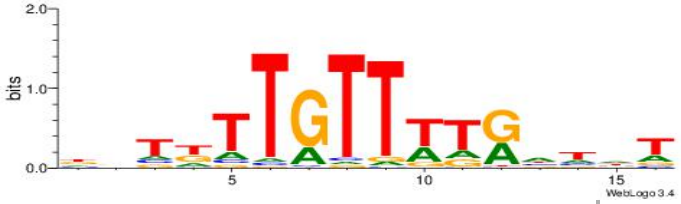
Original motif

Consensus sequence: ADDDYAWAACAAMAHH



Reverse complement motif

Consensus sequence: HDTYTTGTTWTKDDDT



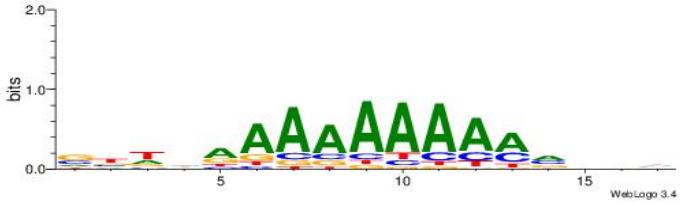
Motif ID:	UP00077
Motif name:	Srf_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	16
Similarity score:	0.0300495

Alignment:

```
VBDDAAAAAAAAMVBHH
-WWAAWYAAAMRWAAAW
```

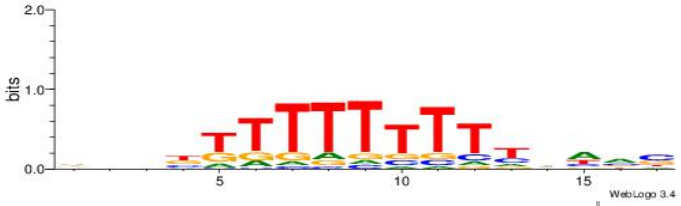
Original motif

Consensus sequence: VBDDAAAAAAAAMVBHH



Reverse complement motif

Consensus sequence: HHVBYTTTTTTTTDDVV



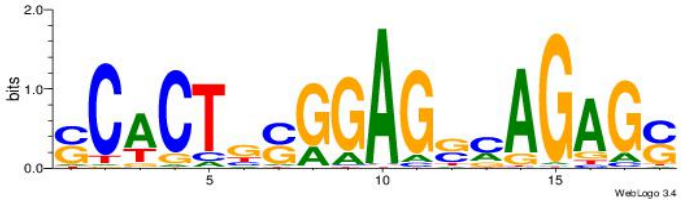
Dataset #: 1 Motif ID: 34 Motif name: C034

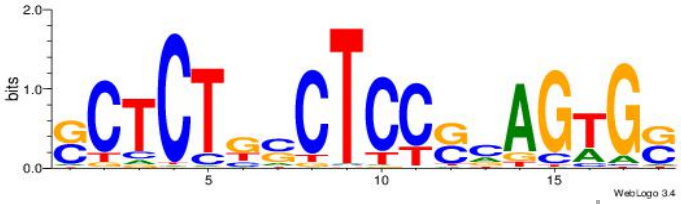
Original motif

Consensus sequence: SCACTGSGGAGSMAGAGS

Reverse complement motif

Consensus sequence: SCTCTRSCTCCSCAGTGS





Best Matches for Motif ID 34 (Highest to Lowest)

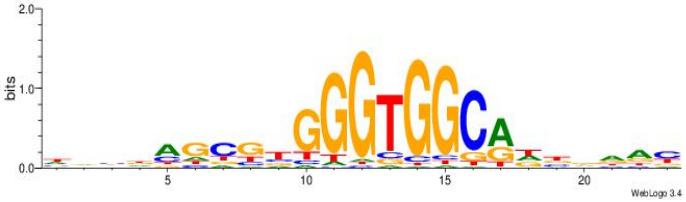
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	18
Similarity score:	0.0434619

Alignment:

```
HVBDAGCGBGGGTGGCRDBDDDB
---SCACTGSGGAGSMAGAGS--
```

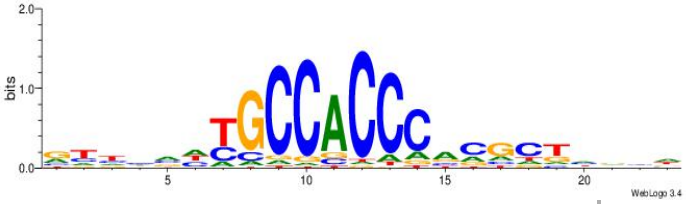
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



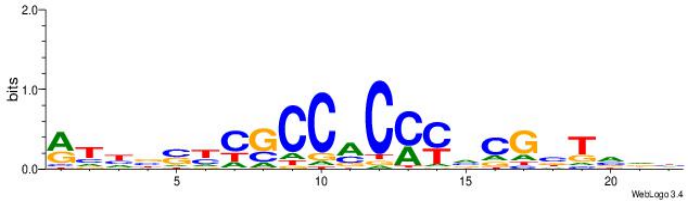
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	18
Similarity score:	0.0468771

Alignment:

```
RTHBSYCGCCMCMYVCGBTVDH
--SCTCTRSCTCCSCAGTGS--
```

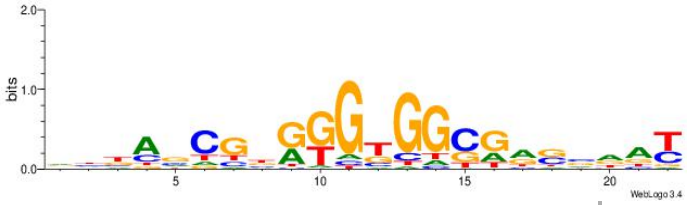
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK

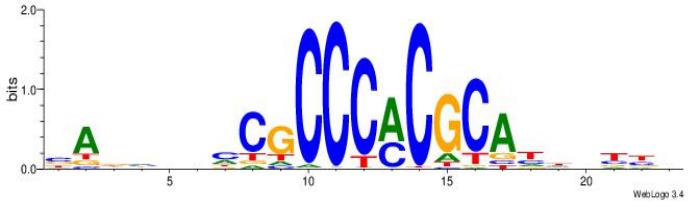


Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3

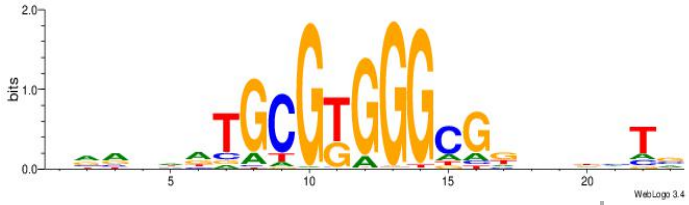
Number of overlap: 18
Similarity score: 0.0486672

Alignment:
BADHBDHCGCCCMCGCAHHDBBV
---SCTCTRSCTCCSCAGTGS--

Original motif
Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif
Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB



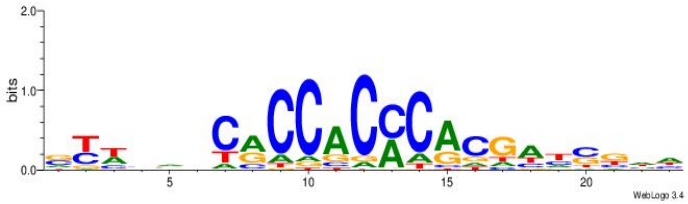
Motif ID: UP00540
Motif name: Gli3_v016060_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 4
Number of overlap: 18
Similarity score: 0.0500626

Alignment:
VYWVVHCRCCACMCACGAHSBHH
--SCTCTRSCTCCSCAGTGS---

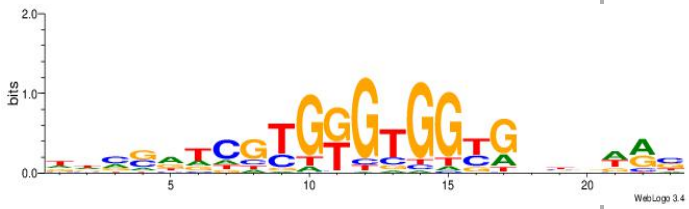
Original motif

Reverse complement motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



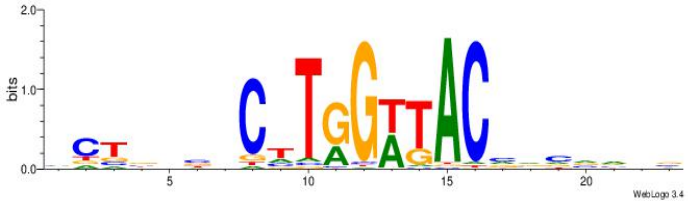
Motif ID:	UP00098
Motif name:	Rfx3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	18
Similarity score:	0.0522233

Alignment:

```
BDBBVBVGTAWCCAAGVBHBAGB
-----SCTCTRSCTCCSCAGTGS
```

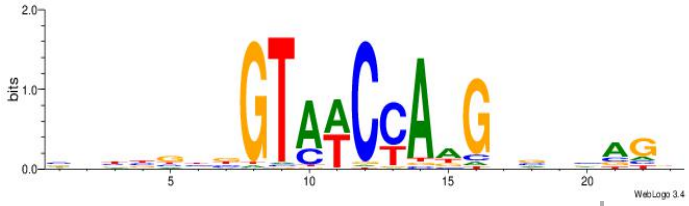
Original motif

Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB



Reverse complement motif

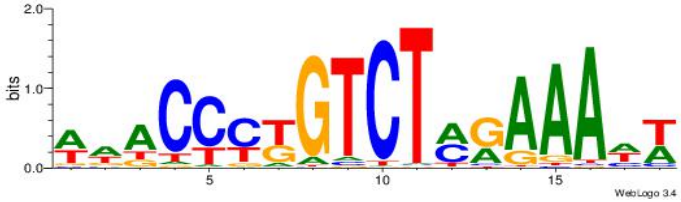
Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB



Dataset #: 1 Motif ID: 35 Motif name: C035

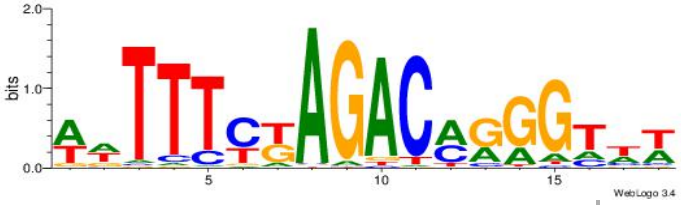
Original motif

Consensus sequence: WWACCYKGTCTMRAAAWW



Reverse complement motif

Consensus sequence: WWTTTMYAGACRKGGTWW



Best Matches for Motif ID 35 (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:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	18
Similarity score:	0.0424694

Alignment:

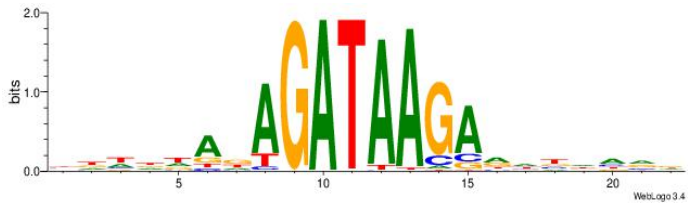
```
HBHDVHDTCTTATCTHTDDHDV
----WWACCYKGTCTMRAAAWW
```

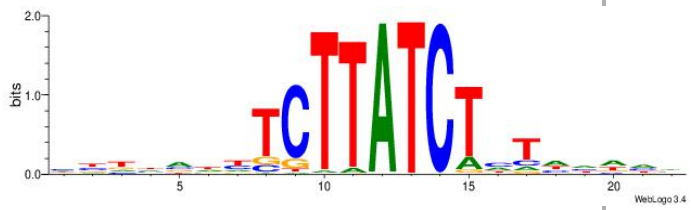
Original motif

Consensus sequence: BDHDDADAGATAAGADHBDHVD

Reverse complement motif

Consensus sequence: HBHDVHDTCTTATCTHTDDHDV





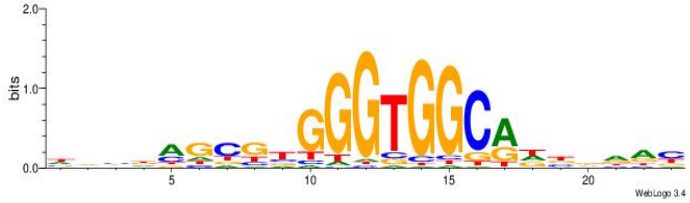
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	18
Similarity score:	0.0529352

Alignment:

```
BDDHVDKGCCACCCVCGCTDBVH
---WWTTTMYAGACRKGGTWW--
```

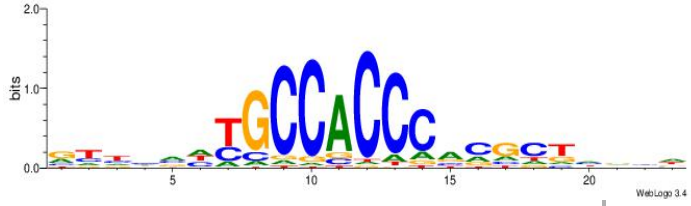
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



Motif ID:	UP00050

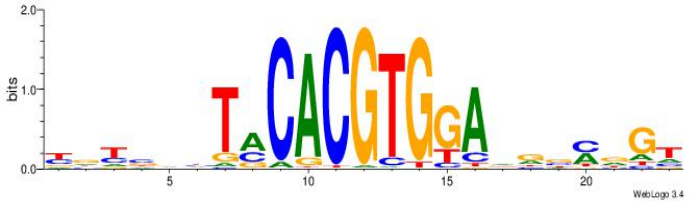
Motif name:	Bhlhb2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	18
Similarity score:	0.0530184

Alignment:

```
YDYBDHTMCACGTGGADDBMDGT
WWTTTMYAGACRKGGTWW-----
```

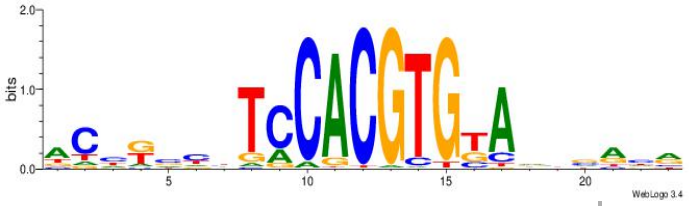
Original motif

Consensus sequence: YDYBDHTMCACGTGGADDBMDGT



Reverse complement motif

Consensus sequence: ACHRBHDTCCACGTGYAHHBMHM

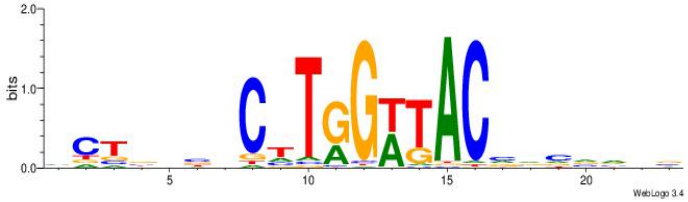


Motif ID:	UP00098
Motif name:	Rfx3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	18

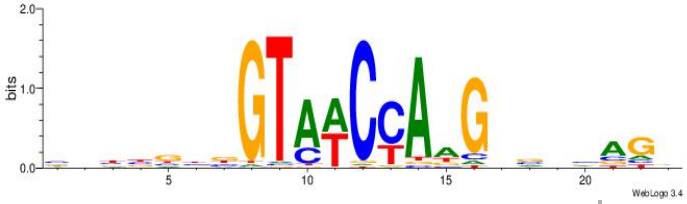
Similarity score: 0.0572016

Alignment:
BDBBVBVGTAWCCAAGVBHBAGB
WWACCYKGTCTMRAAAWW-----

Original motif
Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB



Reverse complement motif
Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB

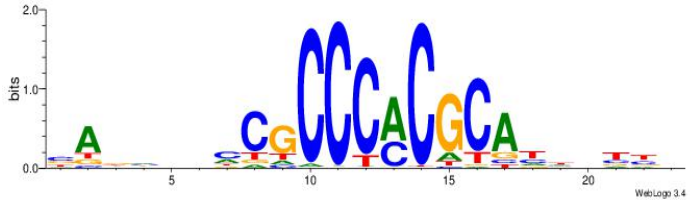


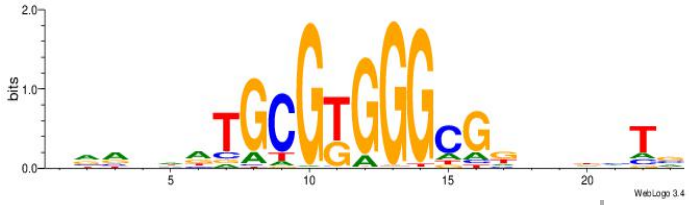
Motif ID: UP00400
Motif name: Zif268
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 2
Number of overlap: 18
Similarity score: 0.0574877

Alignment:
VVVDHHTGCGYGGGCGDHVHHTB
----WWTTTMYAGACRKGGTWW-

Original motif
Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV

Reverse complement motif
Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB

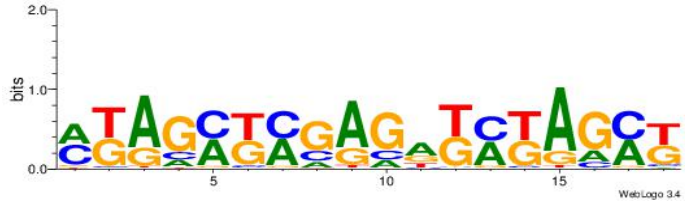




Dataset #: 1 **Motif ID: 36** **Motif name: C036**

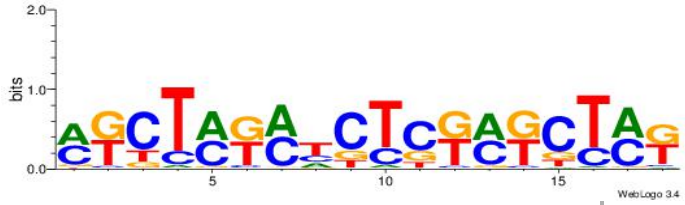
Original motif

Consensus sequence: MKAGMKMGAGAKMKAGMK



Reverse complement motif

Consensus sequence: RRCTRRRTCTCRRRCTRY



Best Matches for Motif ID 36 (Highest to Lowest)

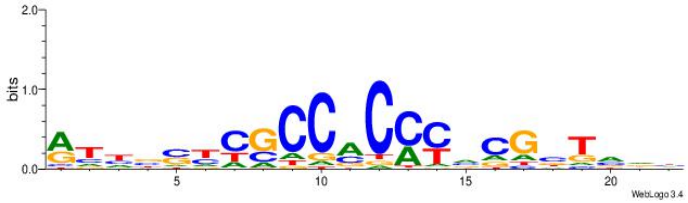
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	18
Similarity score:	0.0426031

Alignment:

HDBABCGBKRGYGGCGMSBHAK
----RRCTRRRTCTCRRRCTRY

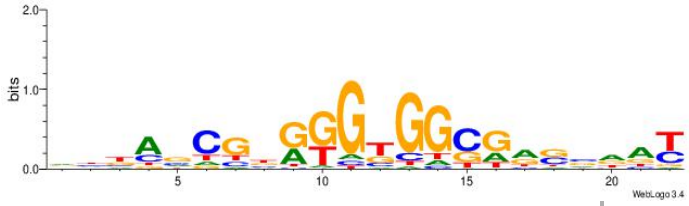
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	18
Similarity score:	0.0454827

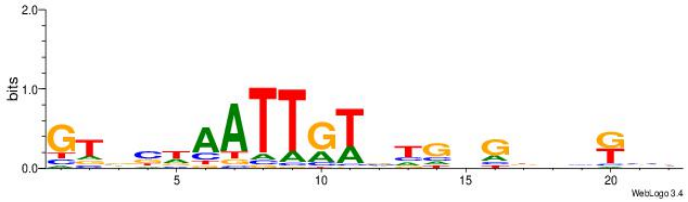
Alignment:
GTVBDAATTGTVTGHGDDHKVB
----RRCTRRRTCTCRRRCTRY

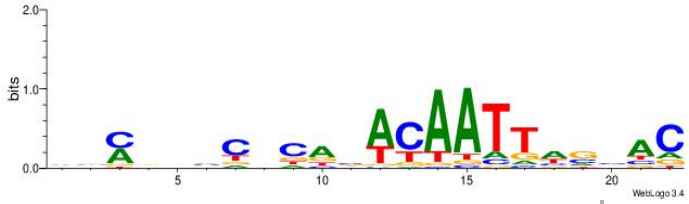
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB

Reverse complement motif

Consensus sequence: VVYDDDCHCAVACAATTDBVAC





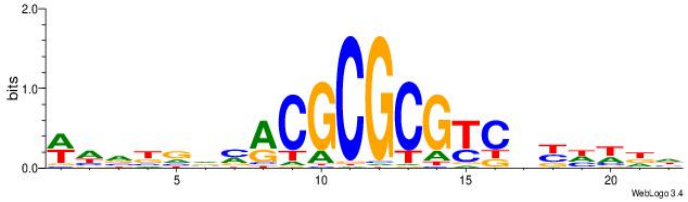
Motif ID:	UP00526
Motif name:	Foxn1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	18
Similarity score:	0.0473662

Alignment:

```
WHVBVVMACGCGCGTCDYHWDH
RRCTRRRTCTCRRRCTRY----
```

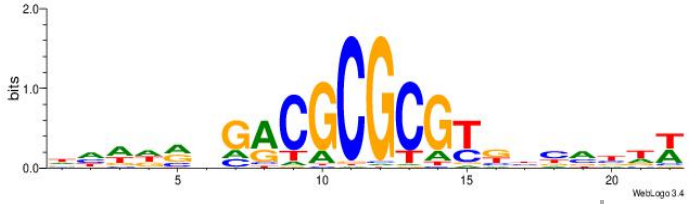
Original motif

Consensus sequence: WHVBVVMACGCGCGTCDYHWDH



Reverse complement motif

Consensus sequence: HDWHMHGACGCGCGTRBVVBHW



Motif ID:	UP00538

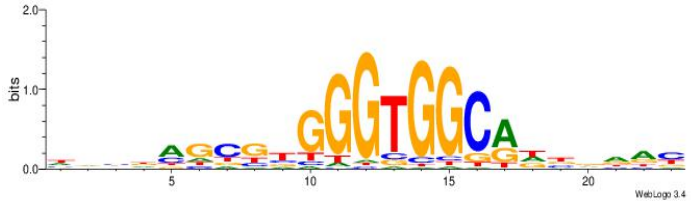
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	18
Similarity score:	0.0480971

Alignment:

```
HVBDAGCGBGGGTGGCRDBDDDB
--MKAGMKMGAGAKMKAGMK---
```

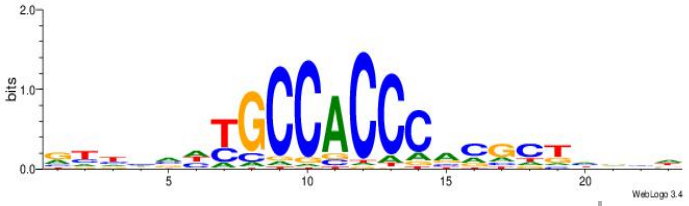
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH

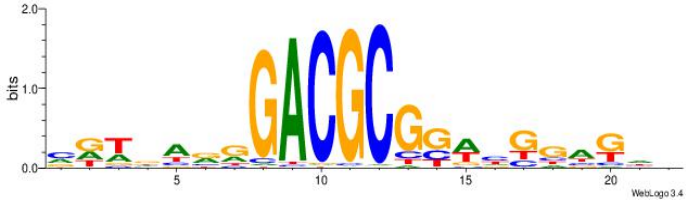


Motif ID:	UP00527
Motif name:	Foxn4_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	18

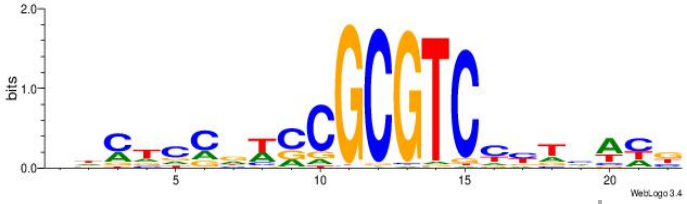
Similarity score: 0.0493902

Alignment:
VDWDARRGACGCGGWHGGAKHV
-RRCTRRRTCTCRRRCTRY---

Original motif
Consensus sequence: VDWDARRGACGCGGWHGGAKHV

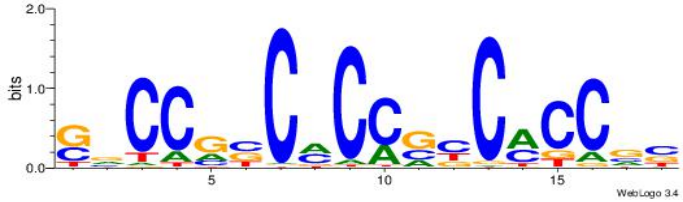


Reverse complement motif
Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV



Dataset #: 1 Motif ID: 37 Motif name: C037

Original motif
Consensus sequence: SVCCGBCMCCSYCMCCVB



Reverse complement motif
Consensus sequence: BVGGYGKSGGYGBCGGVS

Best Matches for Motif ID 37 (Highest to Lowest)

Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement

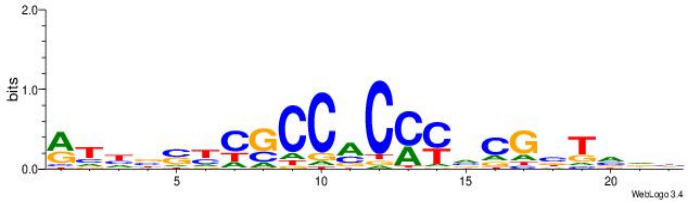
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	18
Similarity score:	0.0265916

Alignment:

```
HDBABCGBKRGYGGCGMSBHAK
-BVGGYGKSGGYGBCGGVS---
```

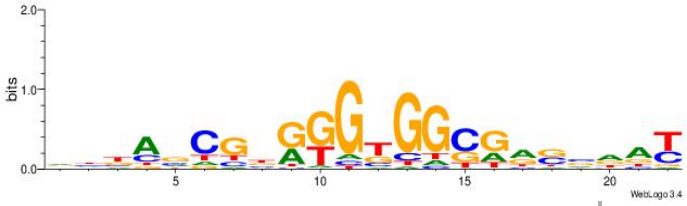
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



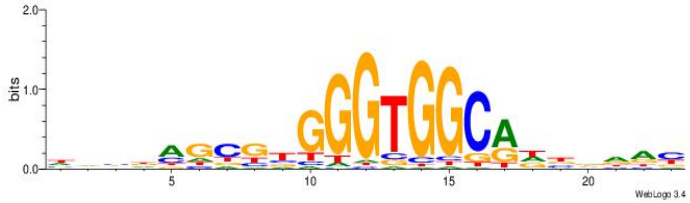
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	18
Similarity score:	0.0363116

Alignment:

HVBDAGCGBGGGTGGCRDBDDDB
--BVGGYGKSGGYGBCGGVS---

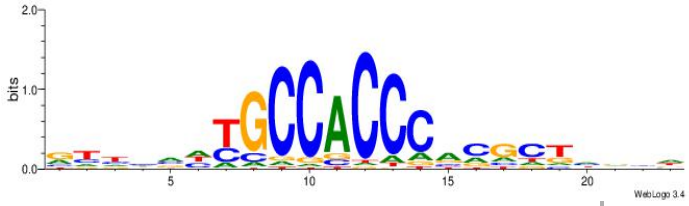
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	18
Similarity score:	0.0376504

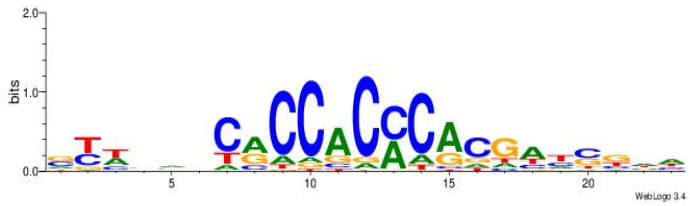
Alignment:
VYWVVHCRCCACMCACGAHSBHH
---SVCCGBCMCCSYCMCCVB--

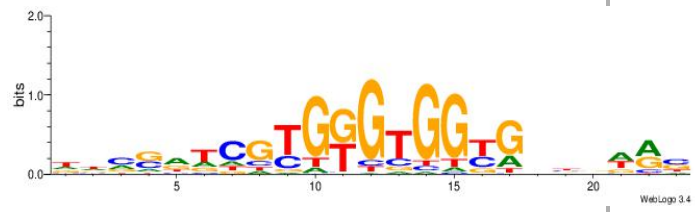
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH

Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV





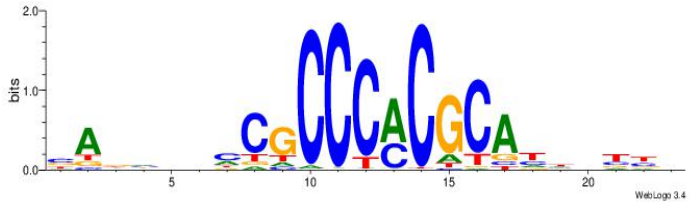
Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	18
Similarity score:	0.0409627

Alignment:

```
VVVDHHTGCGYGGGCGDHVHHTB
----BVGGYGKSGGYGBCGGVS-
```

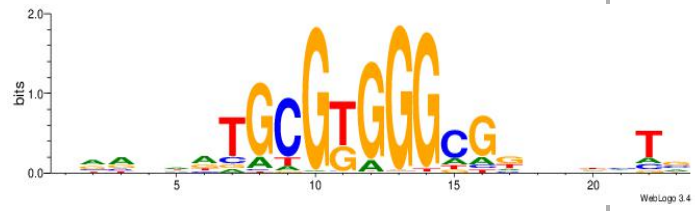
Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif

Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB



Motif ID:	UP00540

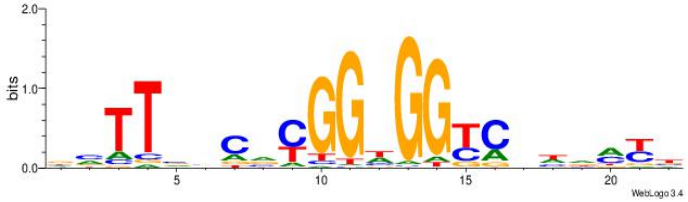
Motif name:	Gli3_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	18
Similarity score:	0.0454859

Alignment:

```
VMYDHDGMCCHCCKBGVVAAVH
----BVGGYGKSGGYGBCGGVS
```

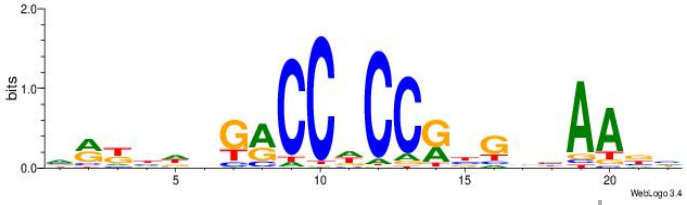
Original motif

Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



Reverse complement motif

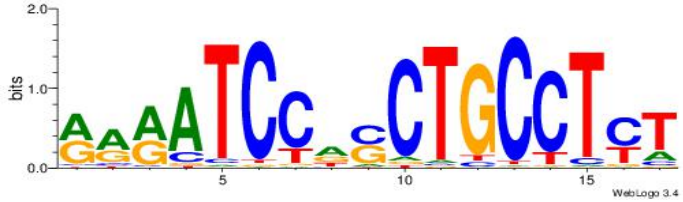
Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH



Dataset #: 1 Motif ID: 38 Motif name: C038

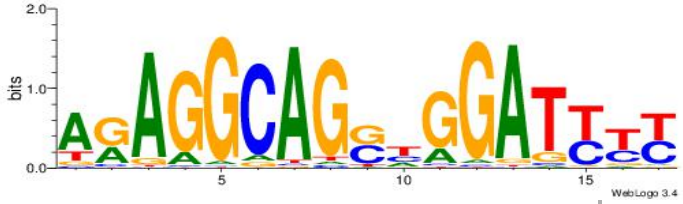
Original motif

Consensus sequence: RRRATCCDSCTGCCTYT



Reverse complement motif

Consensus sequence: AKAGGCAGSDGGATKKK



Best Matches for Motif ID 38 (Highest to Lowest)

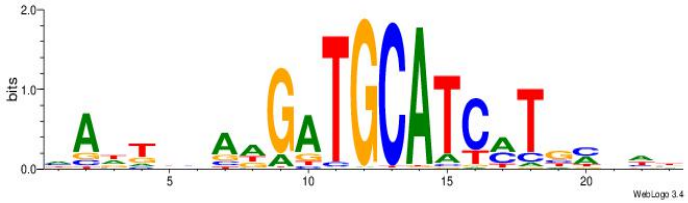
Motif ID:	UP00528
Motif name:	Foxm1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	17
Similarity score:	0.0332889

Alignment:

```
VHVRCAYGATGCATCDTVVADTH
------AKAGGCAGSDGGATKKK
```

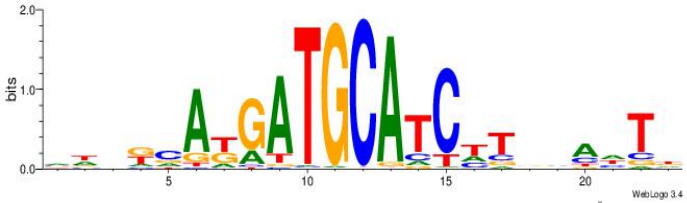
Original motif

Consensus sequence: HADTBVADGATGCATCMTGMVHB



Reverse complement motif

Consensus sequence: VHVRCAYGATGCATCDTVVADTH

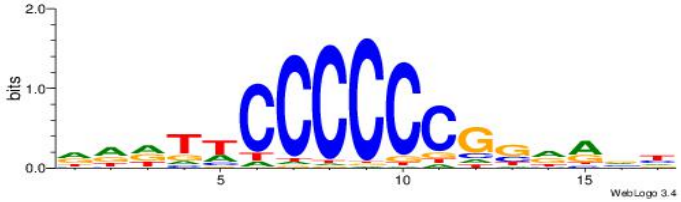


Motif ID:	UP00022
Motif name:	Zfp740_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1

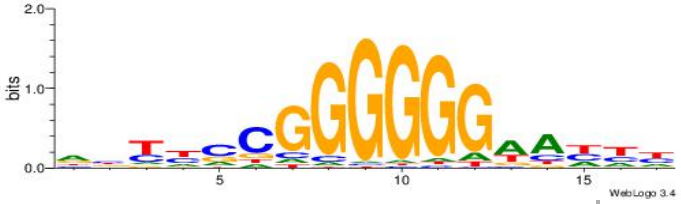
Number of overlap: 17
Similarity score: 0.0415981

Alignment:
HVKDCCGGGGGGWADDD
AKAGGCAGSDGGATKKK

Original motif
Consensus sequence: DDDTWCCCCCCGGDRVH



Reverse complement motif
Consensus sequence: HVKDCCGGGGGGWADDD

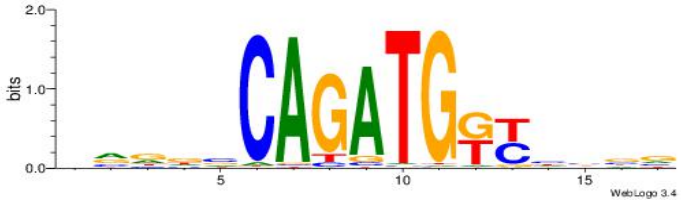


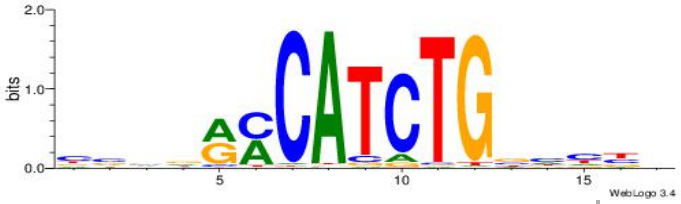
Motif ID: UP00046
Motif name: Tcfe2a_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 17
Similarity score: 0.0467833

Alignment:
VBBDMYCATCTGVHHBH
AKAGGCAGSDGGATKKK

Original motif
Consensus sequence: HVDDVCAGATGKYHBBV

Reverse complement motif
Consensus sequence: VBBDMYCATCTGVHHBH





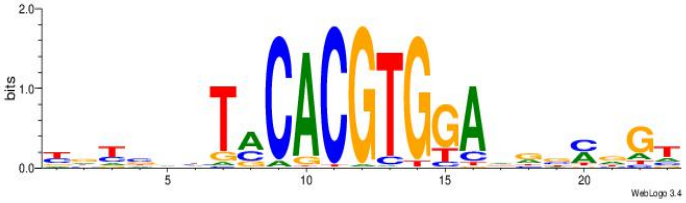
Motif ID:	UP00050
Motif name:	Bhlhb2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	17
Similarity score:	0.0476081

Alignment:

```
ACHRBHDTCCACGTGYAHHBMHM
---RRRATCCDSCTGCCTYT---
```

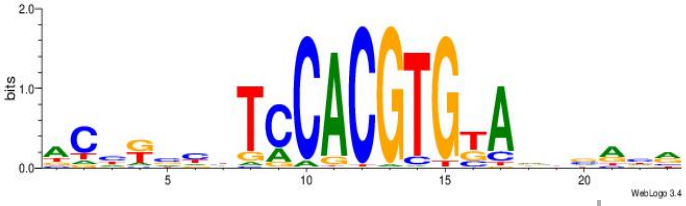
Original motif

Consensus sequence: YDYBDHTMCACGTGGADDBMDGT



Reverse complement motif

Consensus sequence: ACHRBHDTCCACGTGYAHHBMHM



Motif ID:	UP00526

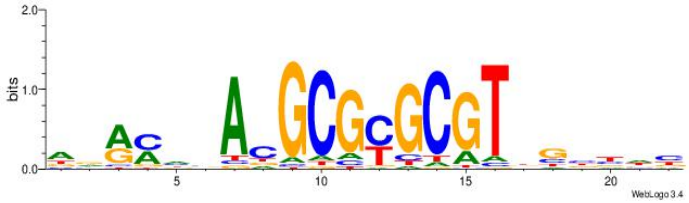
Motif name:	Foxn1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	17
Similarity score:	0.0482666

Alignment:

```
DDRMHBACGCGYGCGTDGBBDB
-RRRATCCDSCTGCCTYT----
```

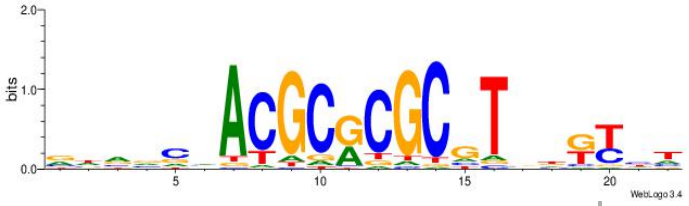
Original motif

Consensus sequence: DDRMHBACGCGYGCGTDGBBDB



Reverse complement motif

Consensus sequence: BDVBCDACGCKCGCGTBHRKHD



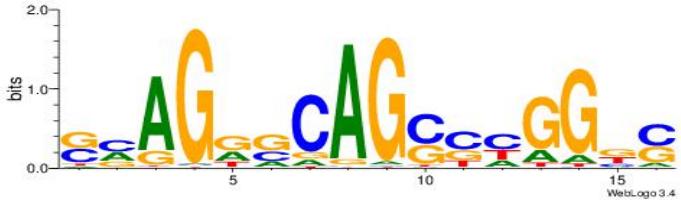
Dataset #: 1 **Motif ID: 39** **Motif name: C039**

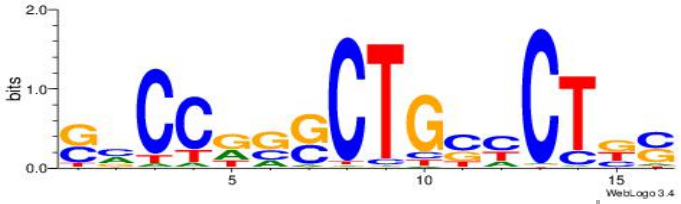
Original motif

Consensus sequence: SMAGRSCAGSSYGGBS

Reverse complement motif

Consensus sequence: SBCCKSSCTGSMCTRS





Best Matches for Motif ID 39 (Highest to Lowest)

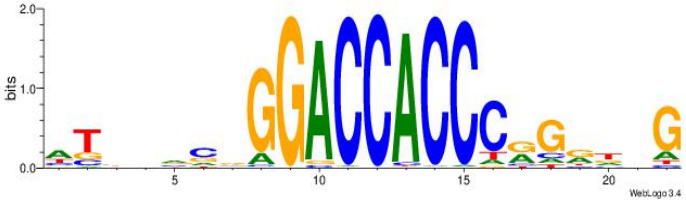
Motif ID:	UP00539
Motif name:	Gli2_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	16
Similarity score:	0.0381161

Alignment:

```
HTBVVVDGGACCACCCRGRDBG
-----SMAGRSCAGSSYGGBS-
```

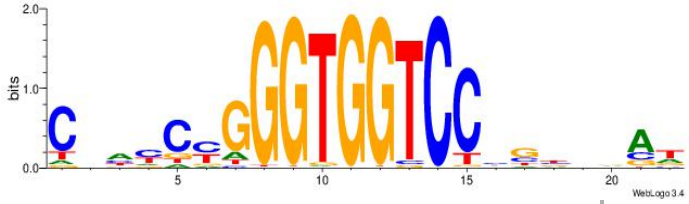
Original motif

Consensus sequence: HTBVVVDGGACCACCCRGRDBG



Reverse complement motif

Consensus sequence: CBDMCMGGGTGGTCCHVBVBAH



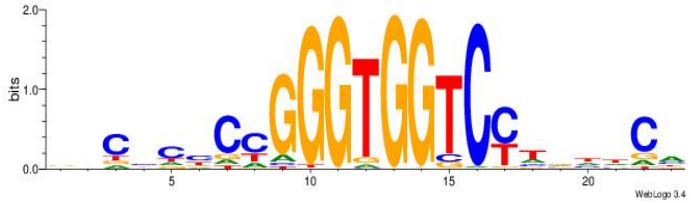
Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	16
Similarity score:	0.0406922

Alignment:

```
BHCBCBCCGGGTGGTCYHVHDCH
---SBCCKSSCTGSMCTRS----
```

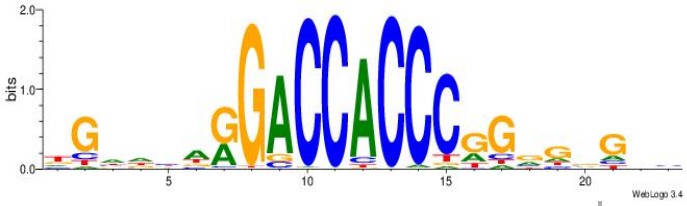
Original motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif

Consensus sequence: HGDHVHKGACCACCCGGBGBGDB

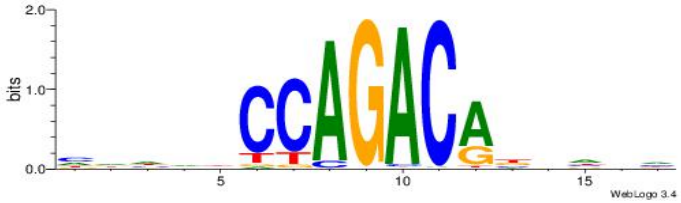


Motif ID:	UP00000
Motif name:	Smad3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1

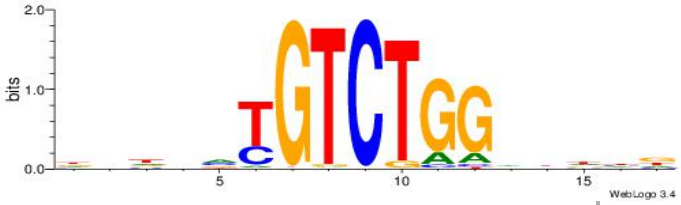
Number of overlap: 16
Similarity score: 0.0416812

Alignment:
HVHBVTGTCTGGDDHDD
-SBCCKSSCTGSMCTRS

Original motif
Consensus sequence: HDHDDCCAGACABBHVH



Reverse complement motif
Consensus sequence: HVHBVTGTCTGGDDHDD



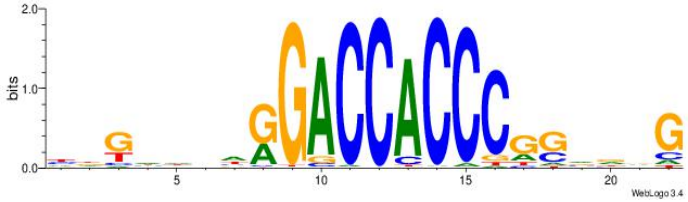
Motif ID: UP00540
Motif name: Gli3_v016060_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 2
Number of overlap: 16
Similarity score: 0.0417968

Alignment:
HDGHHBHRGACCACCCGSVDVG
-----SMAGRSCAGSSYGGBS-

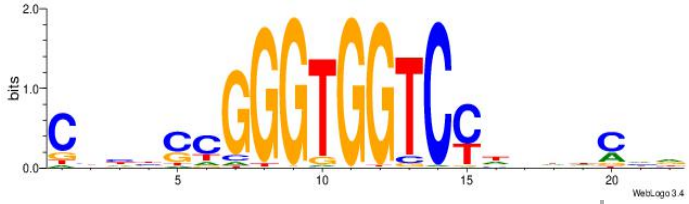
Original motif

Reverse complement motif

Consensus sequence: HDGHHBHRGACCACCCGSVDVG



Consensus sequence: CVHBSCGGGTGGTCMHVHHCDH



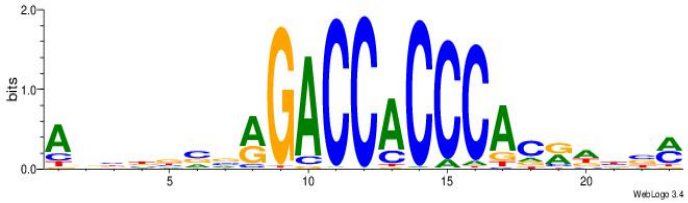
Motif ID:	UP00540
Motif name:	Gli3_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	16
Similarity score:	0.0424976

Alignment:

```
YBVDMGTGGGTGGTCKVVBVBBT
--SBCCKSSCTGSMCTRS-----
```

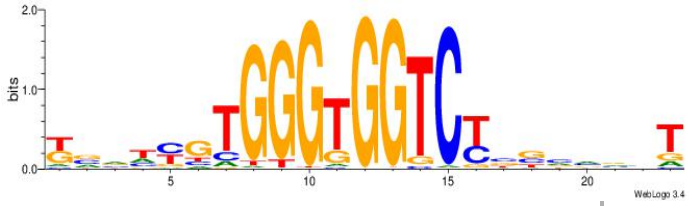
Original motif

Consensus sequence: ABBBBVVRGACCACCCACRDBBM



Reverse complement motif

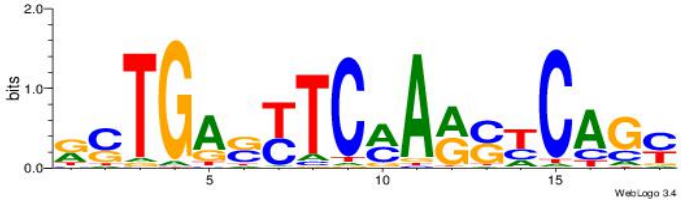
Consensus sequence: YBVDMGTGGGTGGTCKVVBVBBT



Dataset #: 1 **Motif ID: 40** **Motif name: C040**

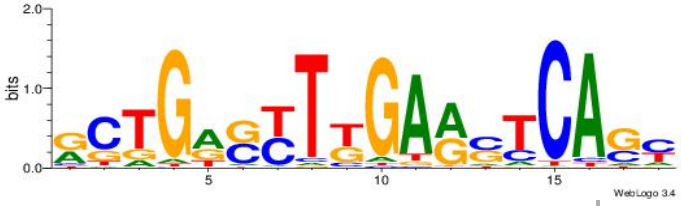
Original motif

Consensus sequence: RSTGASYTCMARSYCAGY



Reverse complement motif

Consensus sequence: KCTGMSKTYGAMSTCASM



Best Matches for Motif ID 40 (Highest to Lowest)

Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	18
Similarity score:	0.0426851

Alignment:

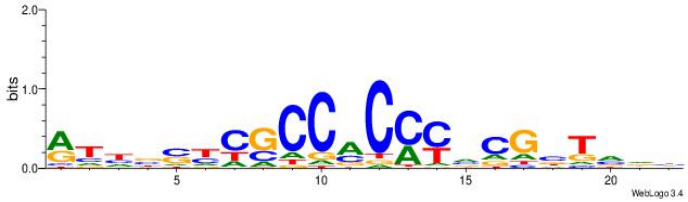
```
RTHBSYCGCCMCMYVCGBTVDH
RSTGASYTCMARSYCAGY----
```

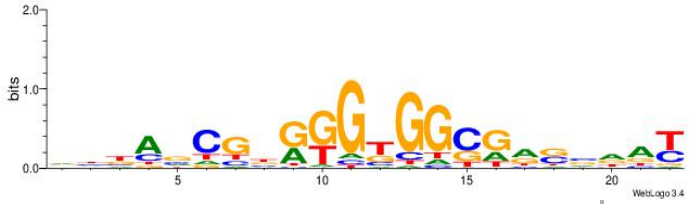
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH

Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK





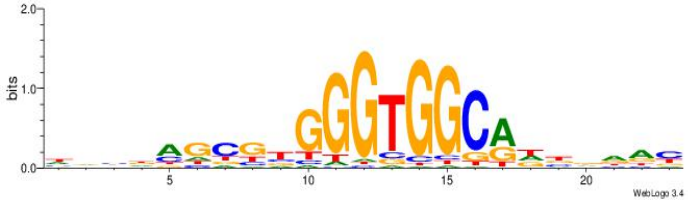
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	18
Similarity score:	0.0443113

Alignment:

```
BDDHVDKGCCACCCVCGCTDBVH
-----KCTGMSKTYGAMSTCASM
```

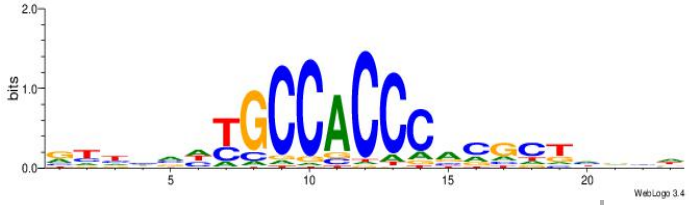
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



Motif ID:	UP00539
Motif name:	Gli2_v016060_primary

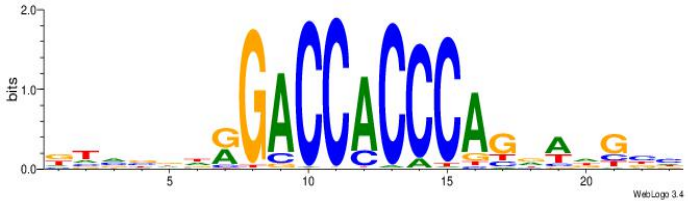
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	18
Similarity score:	0.0450319

Alignment:

```
DTVBDDRGACCACCCAGDWDGBH
----RSTGASYTCMARSYCAGY-
```

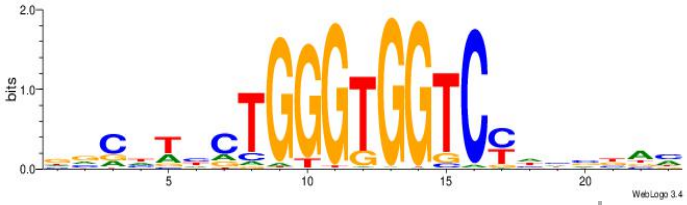
Original motif

Consensus sequence: DTVBDDRGACCACCCAGDWDGBH



Reverse complement motif

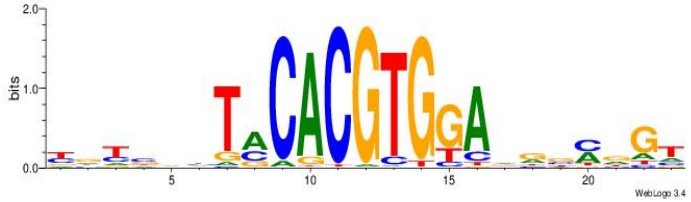
Consensus sequence: DBCDWHCTGGGTGGTCMDHBBAH



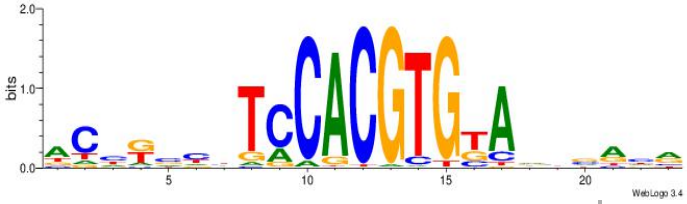
Motif ID:	UP00050
Motif name:	Bhlhb2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	18
Similarity score:	0.0455665

Alignment:
ACHRBHDTCCACGTGYAHHBMHM
KCTGMSKTYGAMSTCASM-----

Original motif
Consensus sequence: YDYBDHTMCACGTGGADDBMDGT



Reverse complement motif
Consensus sequence: ACHRBHDTCCACGTGYAHHBMHM

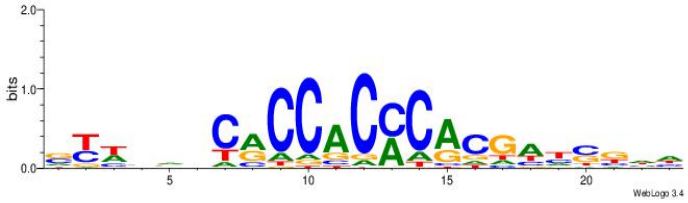


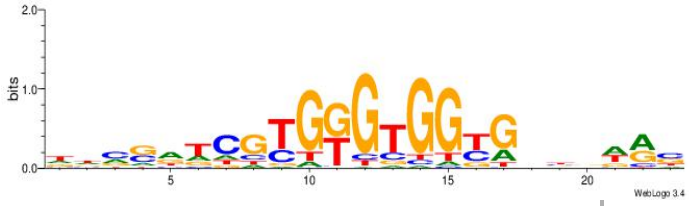
Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	18
Similarity score:	0.0457782

Alignment:
VYWVVHCRCCACMCACGAHSBHH
---RSTGASYTCMARSYCAGY--

Original motif
Consensus sequence: VYWVVHCRCCACMCACGAHSBHH

Reverse complement motif
Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV





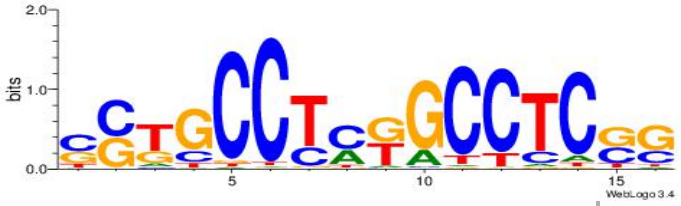
Dataset #: 1 **Motif ID: 41** **Motif name: C041**

Original motif

Consensus sequence: CSGAGGCMKAGGCASS

Reverse complement motif

Consensus sequence: SSTGCCTYRGCCTCSG



Best Matches for Motif ID 41 (Highest to Lowest)

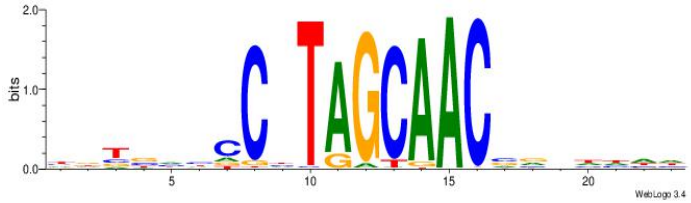
Motif ID:	UP00098
Motif name:	Rfx3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	16
Similarity score:	0.0297471

Alignment:

HDTBHHCCHTAGCAACVVDHHHH
--SSTGCCTYRGCCTCSG-----

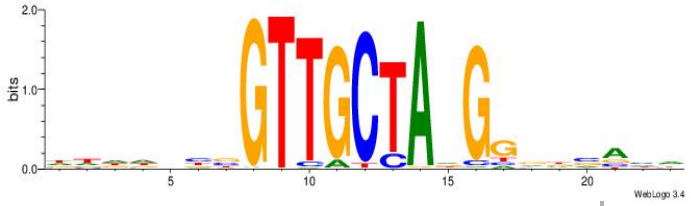
Original motif

Consensus sequence: HDTBHHCCHTAGCAACVVDHHHH



Reverse complement motif

Consensus sequence: HHHHDVVGTTGCTAHGGDHBAHH



Motif ID:	UP00527
Motif name:	Foxn4_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	16
Similarity score:	0.0308327

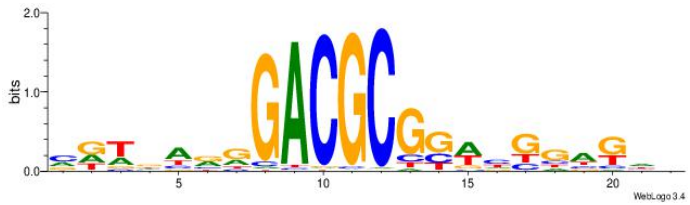
Alignment:
VHYTCCDWCCGCGTCMMTHWHV
-SSTGCCTYRGCCTCSG-----

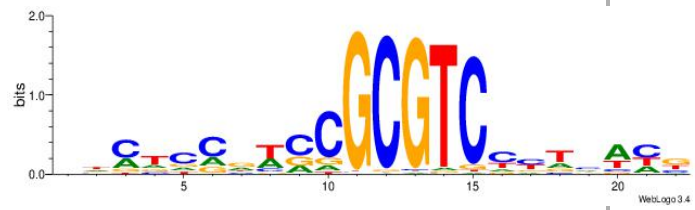
Original motif

Consensus sequence: VDWDARRGACGCGGWHGGAKHV

Reverse complement motif

Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV





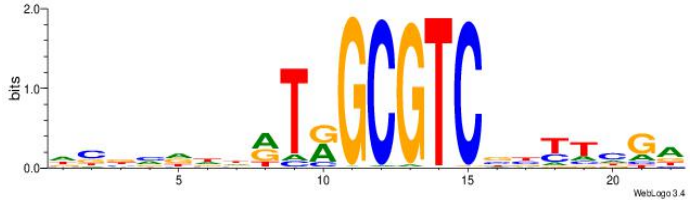
Motif ID:	UP00527
Motif name:	Foxn4_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	16
Similarity score:	0.0317547

Alignment:

```
DBBVDDDRTRGCGTCBBYTHGA
-SSTGCCTYRGCCTCSG-----
```

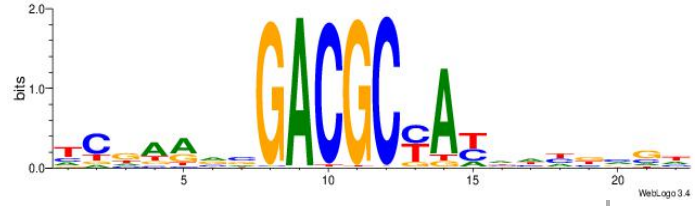
Original motif

Consensus sequence: DBBVDDDRTRGCGTCBBYTHGA



Reverse complement motif

Consensus sequence: TCDAMVBGACGCMAKDDDVBBD



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:	1
Number of overlap:	16
Similarity score:	0.0317742

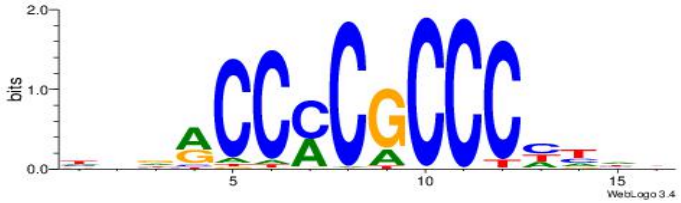
Alignment:

HBDRCCMCGCCCHHHD

CSGAGGCMKAGGCASS

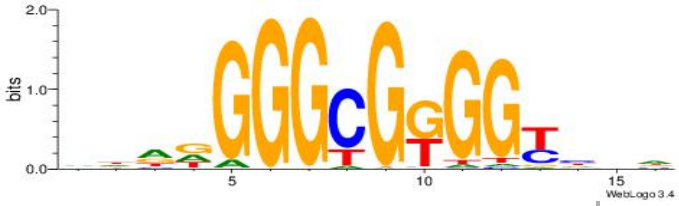
Original motif

Consensus sequence: HBDRCCMCGCCCHHHD



Reverse complement motif

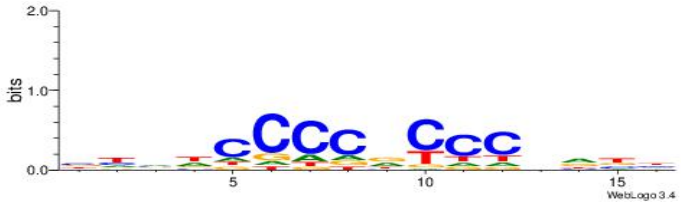
Consensus sequence: DHHDGGGCGRGGKHBH



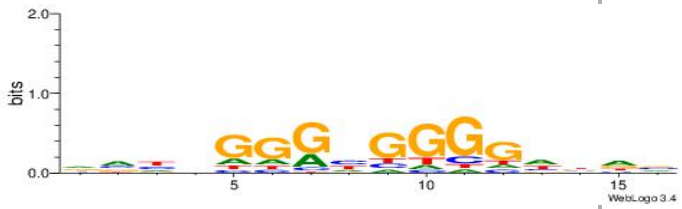
Motif ID:	UP00099
Motif name:	Ascl2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	16
Similarity score:	0.0321641

Alignment:
HVDVGGGHGGGGDBHB
CSGAGGCMKAGGCASS

Original motif
Consensus sequence: BHVDCCCCDCCCBDBH

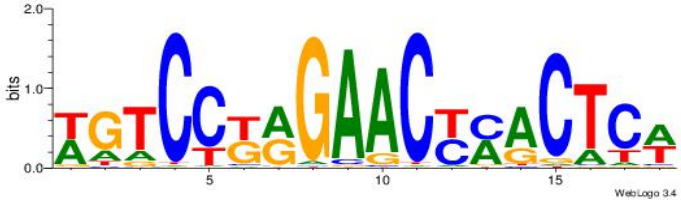


Reverse complement motif
Consensus sequence: HVDVGGGHGGGGDBHB

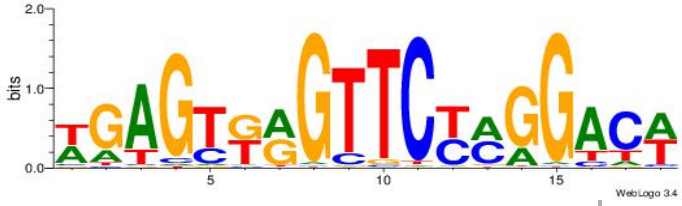


Dataset #: 1 Motif ID: 42 Motif name: C042

Original motif
Consensus sequence: WGTCCKRGAACYMACTCW



Reverse complement motif
Consensus sequence: WGAGTRMGTTCKRGGACW



Best Matches for Motif ID 42 (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

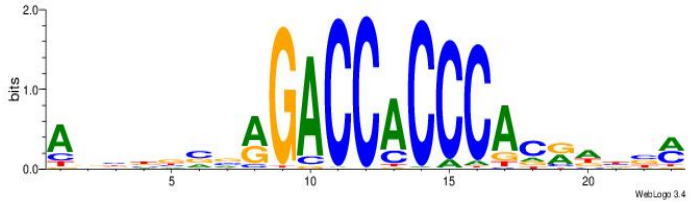
Direction:	Forward
Position number:	5
Number of overlap:	18
Similarity score:	0.0266184

Alignment:

```
YBVDMGTGGGTGGTCKVVBVBBT
----WGAGTRMGTTCKRGGACW-
```

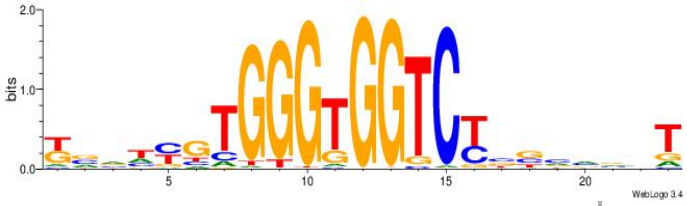
Original motif

Consensus sequence: ABBBBVVRGACCACCCACRDBBM



Reverse complement motif

Consensus sequence: YBVDMGTGGGTGGTCKVVBVBBT



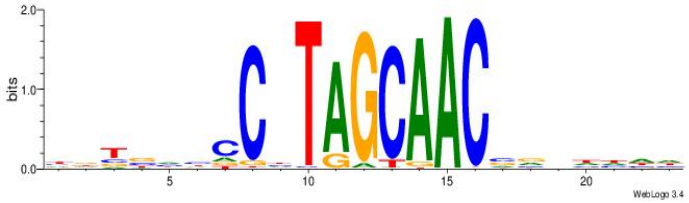
Motif ID:	UP00098
Motif name:	Rfx3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	18
Similarity score:	0.0330025

Alignment:

HDTBHHCCHTAGCAACVVDHHHH
----WGTCCKRGAACYMACTCW-

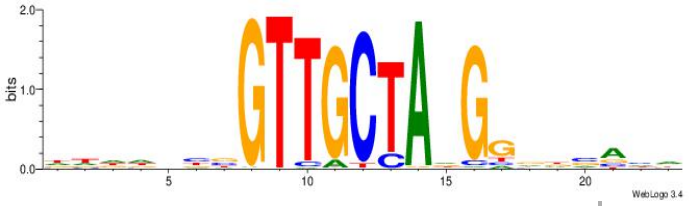
Original motif

Consensus sequence: HDTBHHCCHTAGCAACVVDHHHH



Reverse complement motif

Consensus sequence: HHHHDVVGTTGCTAHGGDHBAHH



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:	2
Number of overlap:	18
Similarity score:	0.03417

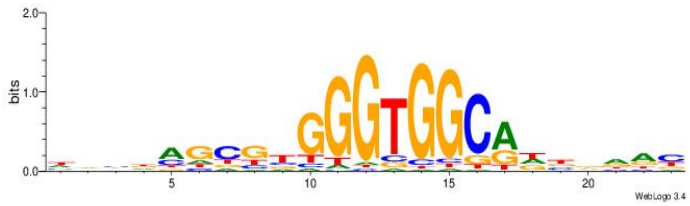
Alignment:
BDDHVDKGCCACCCVCGCTDBVH
-WGTCCKRGAACYMACTCW----

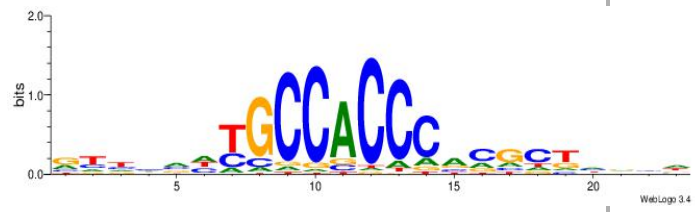
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB

Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH





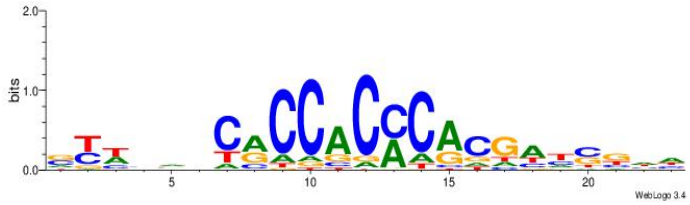
Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	18
Similarity score:	0.0347873

Alignment:

```
HHBSHTCGTGRGTGGKGDBVWMV
----WGAGTRMGTTCKRGGACW-
```

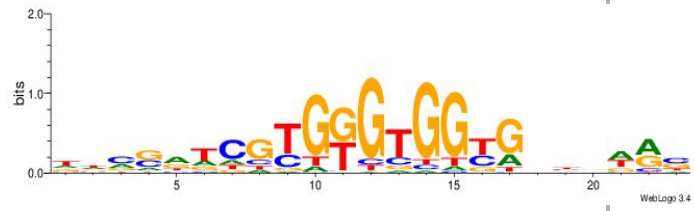
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



Motif ID:	UP00098

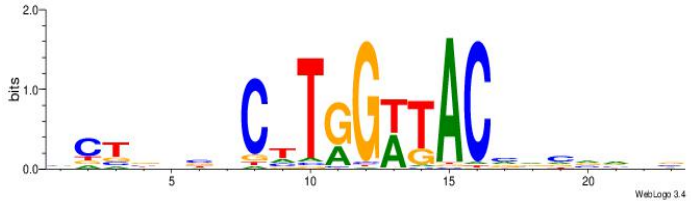
Motif name:	Rfx3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	18
Similarity score:	0.035399

Alignment:

```
VCTBHBVCTTGGWTACVVVVVDB
----WGTCCKRGAACYMACTCW-
```

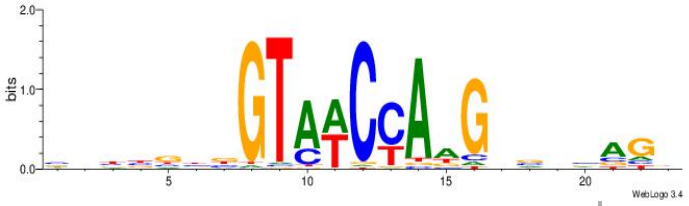
Original motif

Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB



Reverse complement motif

Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB



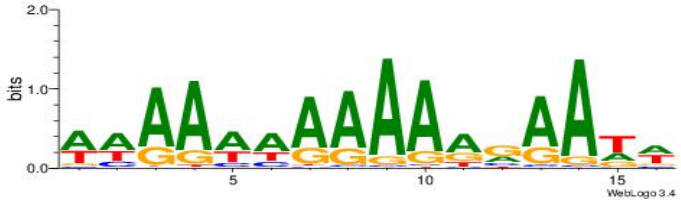
Dataset #: 1 **Motif ID: 43** **Motif name: C043**

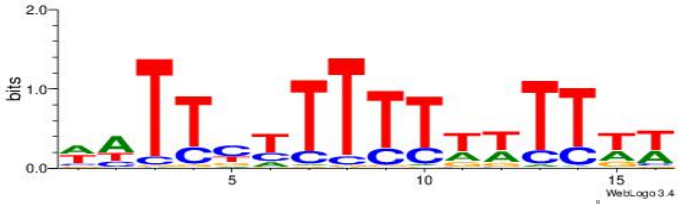
Original motif

Consensus sequence: WWAAWAAAAAARAATW

Reverse complement motif

Consensus sequence: WATTMTTTTTTWTTWW





Best Matches for Motif ID 43 (Highest to Lowest)

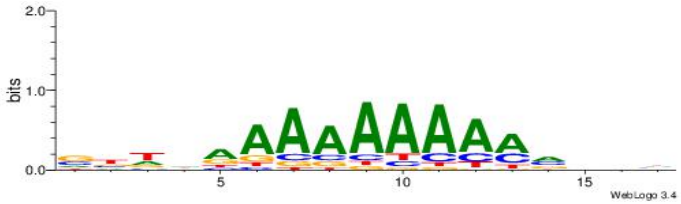
Motif ID:	UP00077
Motif name:	Srf_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	16
Similarity score:	0.0232401

Alignment:

```
VBDDAAAAAAAAMVBHH
-WWAAWAAAAAARAATW
```

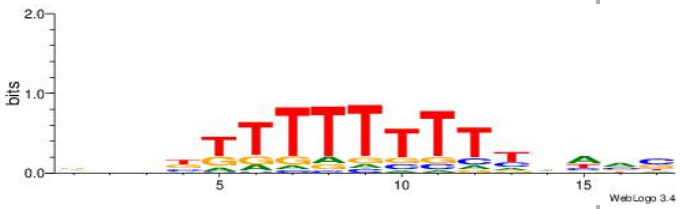
Original motif

Consensus sequence: VBDDAAAAAAAAMVBHH



Reverse complement motif

Consensus sequence: HHVBYTTTTTTTTDDVV



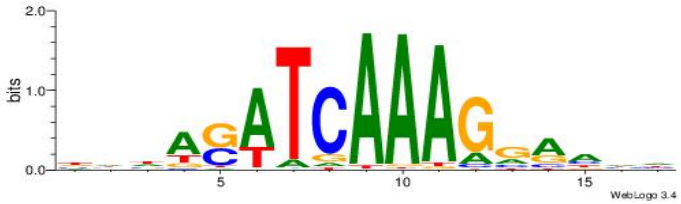
Motif ID:	UP00054
Motif name:	Tcf7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	16
Similarity score:	0.0288687

Alignment:

```
BHHASATCAAAGGAHHH
-WWAAWAAAAAARAATW
```

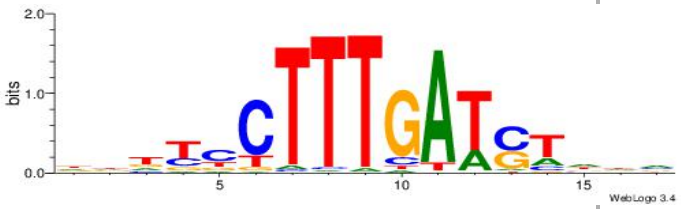
Original motif

Consensus sequence: BHHASATCAAAGGAHHH



Reverse complement motif

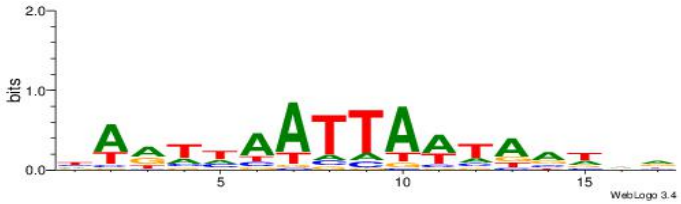
Consensus sequence: HHHTCCTTTGATSTHHV



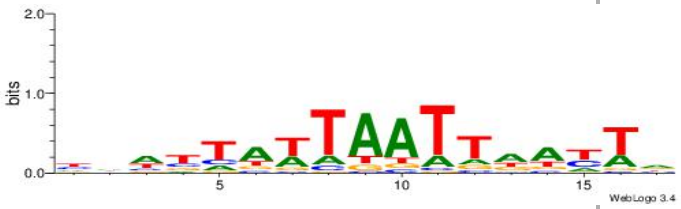
Motif ID:	UP00255
Motif name:	Dbx1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	16
Similarity score:	0.0296812

Alignment:
DHDBTAWTAATTHAKTH
-WATTMTTTTTTWTTWW

Original motif
Consensus sequence: HARTHAATTAWTAVDHD



Reverse complement motif
Consensus sequence: DHDBTAWTAATTHAKTH

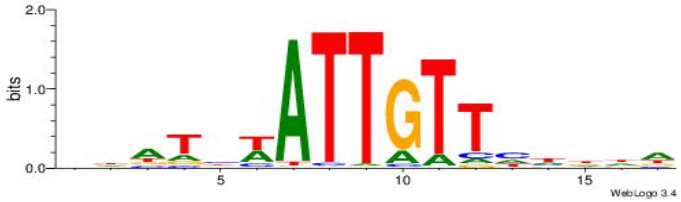


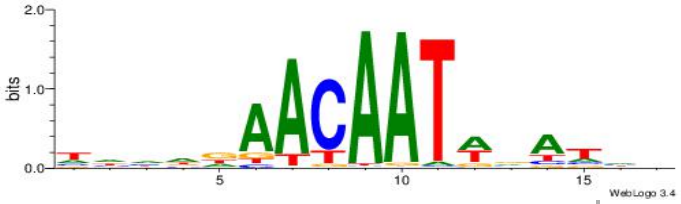
Motif ID:	UP00051
Motif name:	Sox8_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	16
Similarity score:	0.0320831

Alignment:
DDATBWATTGTTHHDDD
-WATTMTTTTTTWTTWW

Original motif
Consensus sequence: DDATBWATTGTTHHDDD

Reverse complement motif
Consensus sequence: DDDHDAACAATWBATDD





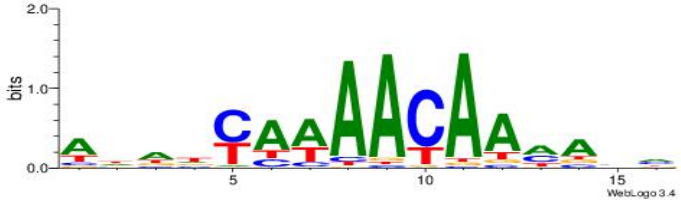
Motif ID:	UP00061
Motif name:	Foxl1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	16
Similarity score:	0.0327018

Alignment:

```
HDTYTTGTTWTKDDDT
WATTMTTTTTTWTTWW
```

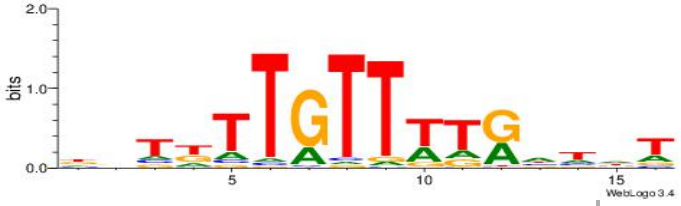
Original motif

Consensus sequence: ADDDYAWAACAAMAHH



Reverse complement motif

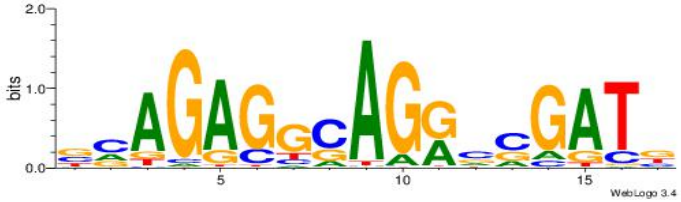
Consensus sequence: HDTYTTGTTWTKDDDT



Dataset #: 1 Motif ID: 44 Motif name: C044

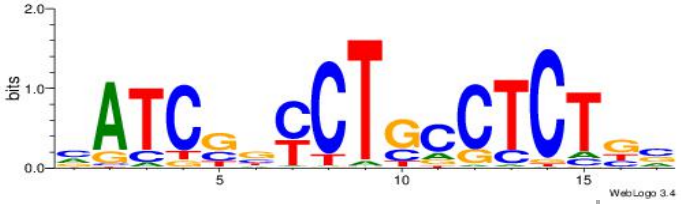
Original motif

Consensus sequence: BVAGAGGCAGRVSGATB



Reverse complement motif

Consensus sequence: BATCSVMCTGCCTCTVB



Best Matches for Motif ID 44 (Highest to Lowest)

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:	17
Similarity score:	0.0438724

Alignment:

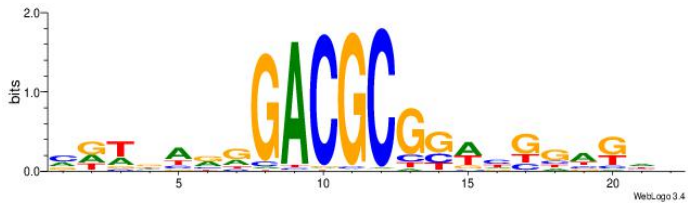
```
VDWDARRGACGCGGWHGGAKHV
----BVAGAGGCAGRVSGATB-
```

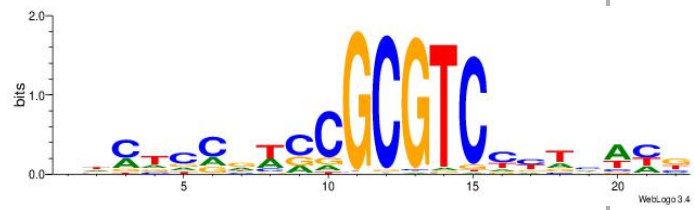
Original motif

Consensus sequence: VDWDARRGACGCGGWHGGAKHV

Reverse complement motif

Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV





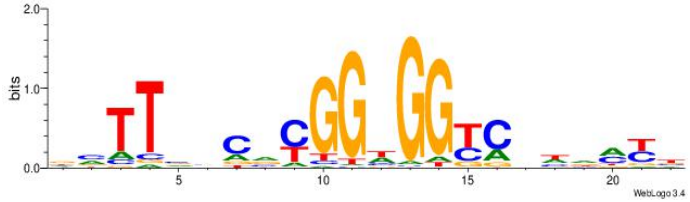
Motif ID:	UP00540
Motif name:	Gli3_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	17
Similarity score:	0.046578

Alignment:

```
VMYDHDGMCCHCCKBGVVAAVH
-BATCSVMCTGCCTCTVB----
```

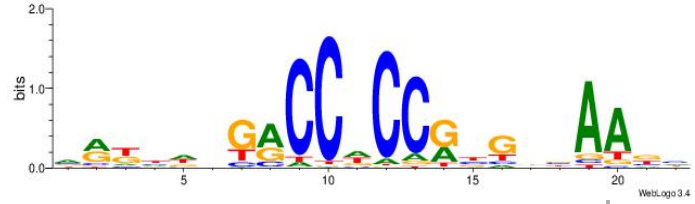
Original motif

Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



Reverse complement motif

Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH



Motif ID:	UP00031

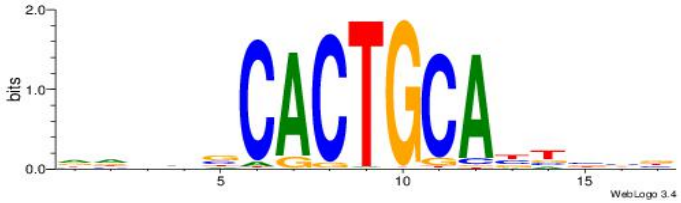
Motif name:	Zbtb3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	17
Similarity score:	0.046833

Alignment:

```
DDBBBCACTGCABTBBB
BATCSVMCTGCCTCTVB
```

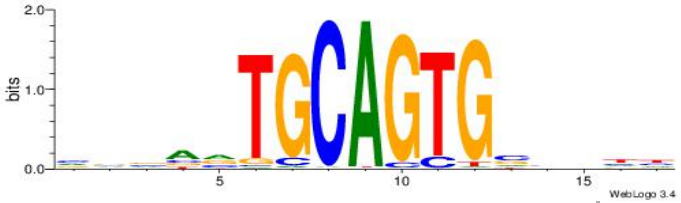
Original motif

Consensus sequence: DDBBBCACTGCABTBBB



Reverse complement motif

Consensus sequence: BBBAVTGCAGTGBBVDD

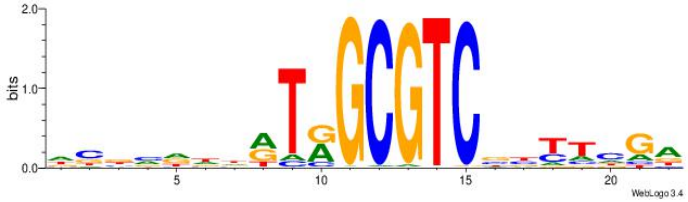


Motif ID:	UP00527
Motif name:	Foxn4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	17

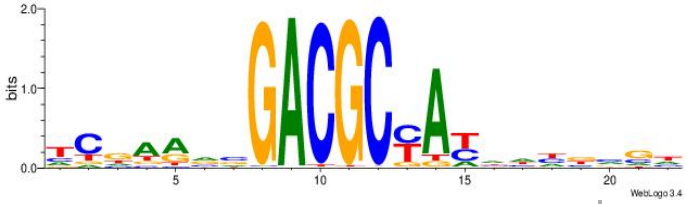
Similarity score: 0.049551

Alignment:
TCDAMVBGACGCMAKDDDVBBD
----BVAGAGGCAGRVSGATB-

Original motif
Consensus sequence: DBBVDDDRTRGCGTCBBYTHGA



Reverse complement motif
Consensus sequence: TCDAMVBGACGCMAKDDDVBBD

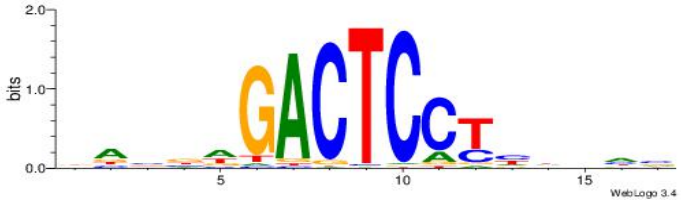


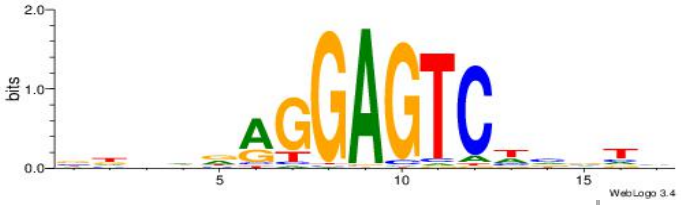
Motif ID: UP00095
Motif name: Zfp691_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 1
Number of overlap: 17
Similarity score: 0.0496109

Alignment:
DABBWGACTCCTHDVHV
BATCSVMCTGCCTCTVB

Original motif
Consensus sequence: DABBWGACTCCTHDVHV

Reverse complement motif
Consensus sequence: VHBDDAGGAGTCWBBTD

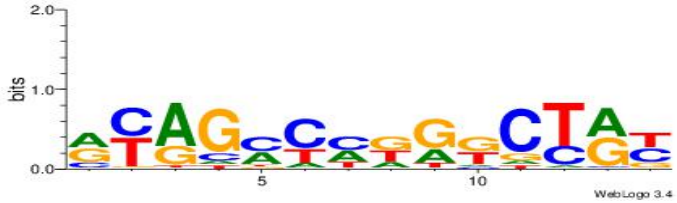




Dataset #: 1 **Motif ID: 45** **Motif name: C045**

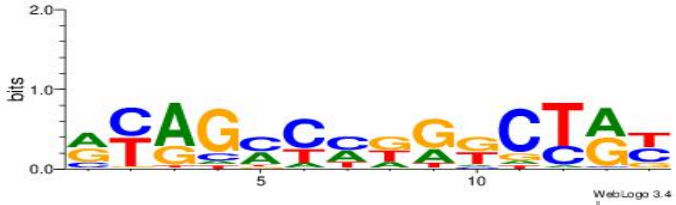
Original motif

Consensus sequence: RYAGMCMKGKCTRY



Reverse complement motif

Consensus sequence: MKAGYCYRGRCTKK



Best Matches for Motif ID 45 (Highest to Lowest)

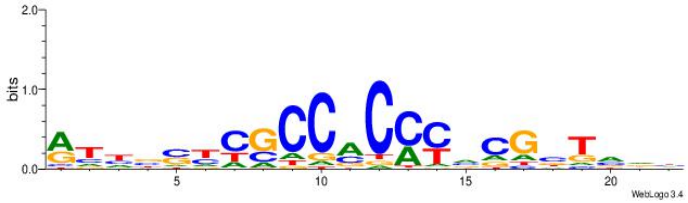
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	14
Similarity score:	0.0303562

Alignment:

HDBABCGBKRGYGGCGMSBHAK
-RYAGMCMKGKCTRY-------

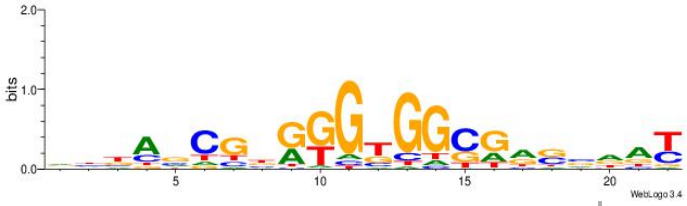
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



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:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0355506

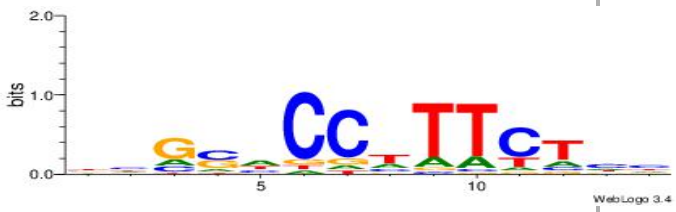
Alignment:
DDAGAADGGDSCDV
RYAGMCMKGKCTRY

Original motif

Consensus sequence: DDAGAADGGDSCDV

Reverse complement motif

Consensus sequence: BHGSDCCDTTCTHH



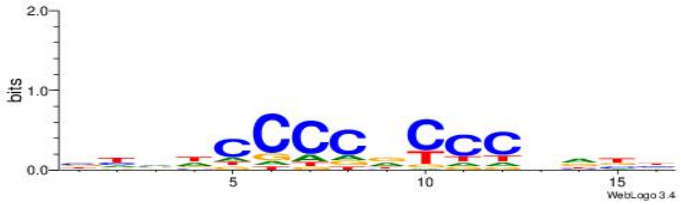
Motif ID:	UP00099
Motif name:	Ascl2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	14
Similarity score:	0.0391606

Alignment:

```
HVDVGGGHGGGGDBHB
-MKAGYCYRGRCTKK-
```

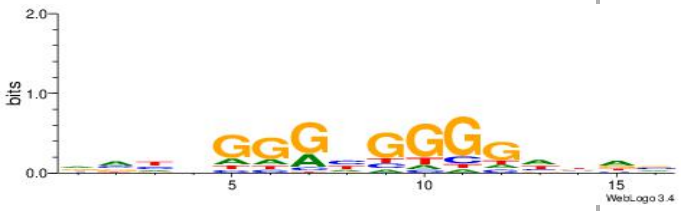
Original motif

Consensus sequence: BHVDCCCCDCCCBDBH



Reverse complement motif

Consensus sequence: HVDVGGGHGGGGDBHB



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:	2
Number of overlap:	14
Similarity score:	0.0399089

Alignment:

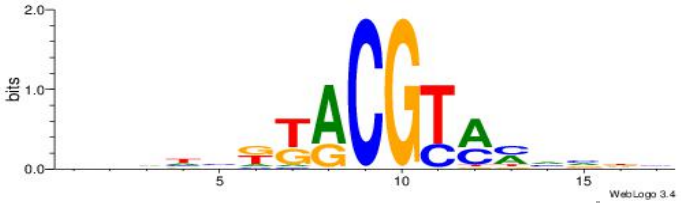
```
BVVDVRYACGTRYVBHB
--MKAGYCYRGRCTKK-
```

Original motif

Consensus sequence: BHBBKKACGTMMVDBVB

Reverse complement motif

Consensus sequence: BVVDVRYACGTRYVBHB

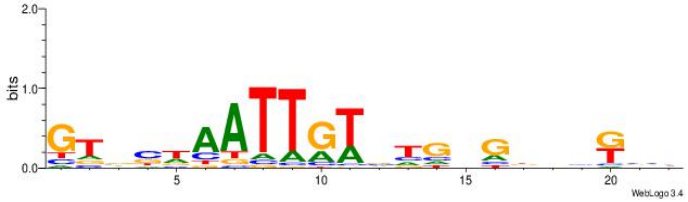


Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	14

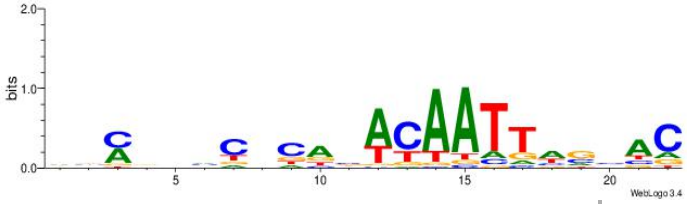
Similarity score: 0.0406925

Alignment:
GTVBDAATTGTVTGHGDDHKVB
------MKAGYCYRGRCTKK--

Original motif
Consensus sequence: GTVBDAATTGTVTGHGDDHKVB

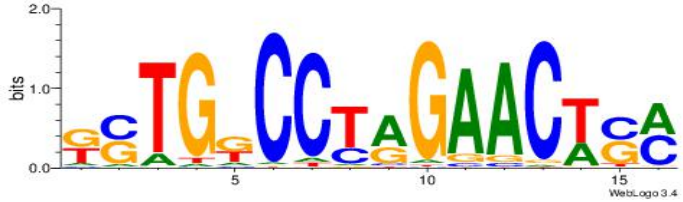


Reverse complement motif
Consensus sequence: VVYDDDCHCAVACAATTDBVAC

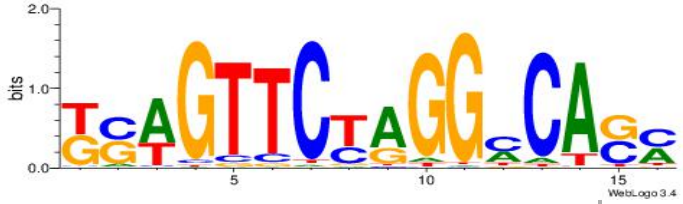


Dataset #: 1 Motif ID: 46 Motif name: C046

Original motif
Consensus sequence: KSTGKCCTRGAACWSM



Reverse complement motif
Consensus sequence: YSWGTTCKAGGYCASY



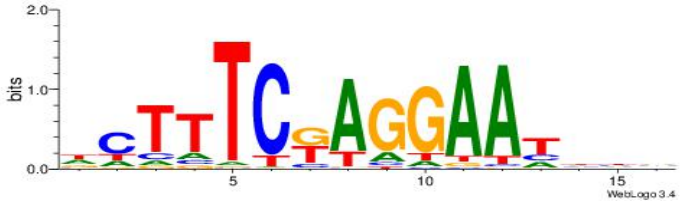
Best Matches for Motif ID 46 (Highest to Lowest)

Motif ID:	UP00043
Motif name:	Bcl6b_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif

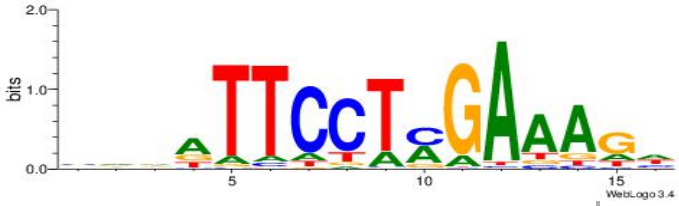
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	16
Similarity score:	0.033819

Alignment:
DCTTTCKAGGAATHHV
KSTGKCCTRGAACWSM

Original motif
Consensus sequence: DCTTTCKAGGAATHHV



Reverse complement motif
Consensus sequence: VHHATTCCTYGAAAGD

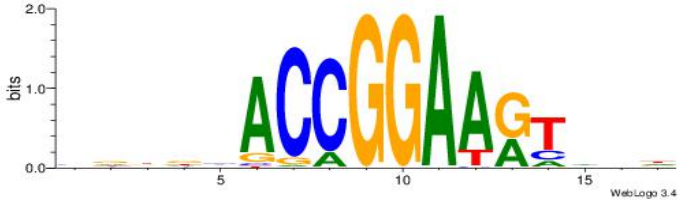


Motif ID:	UP00414
Motif name:	Ets1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	16
Similarity score:	0.0383006

Alignment:
BDDDHACCGGAARTVDD
KSTGKCCTRGAACWSM-

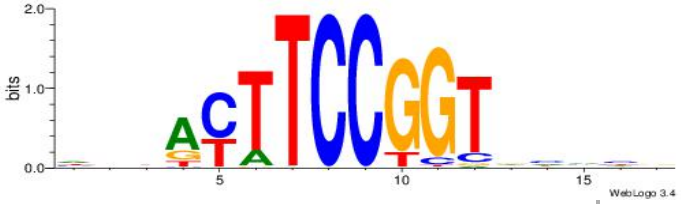
Original motif

Consensus sequence: BDDDHACCGGAARTVDD



Reverse complement motif

Consensus sequence: DDBAMTTCCGGTDHDHB



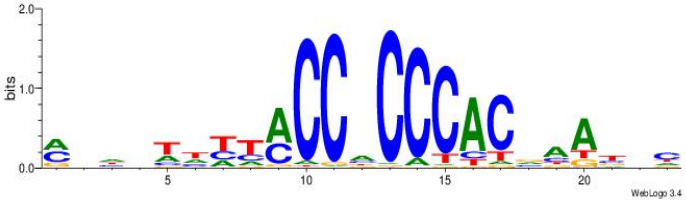
Motif ID:	UP00538
Motif name:	Gli1_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	16
Similarity score:	0.0428174

Alignment:

```
DVVTTVGTGGGHGGYAMHWHHHY
---YSWGTTCKAGGYCASY----
```

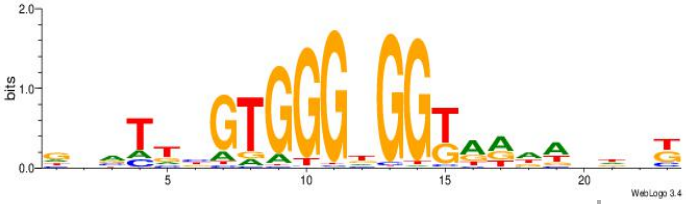
Original motif

Consensus sequence: MHHHWHYTMCCHCCCACVAABVH



Reverse complement motif

Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY



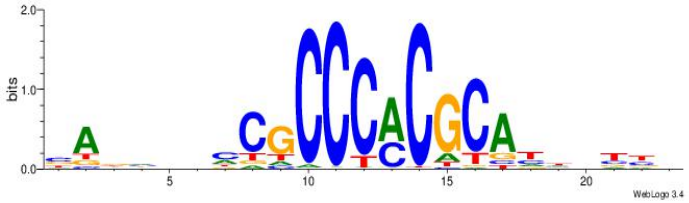
Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	16
Similarity score:	0.0436721

Alignment:

```
VVVDHHTGCGYGGGCGDHVHHTB
--YSWGTTCKAGGYCASY-----
```

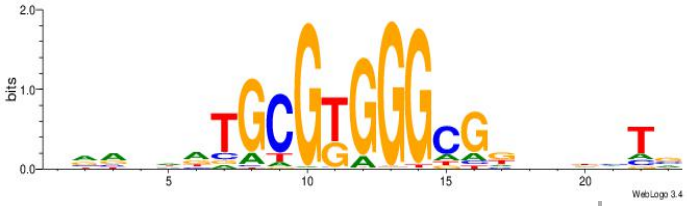
Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif

Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB

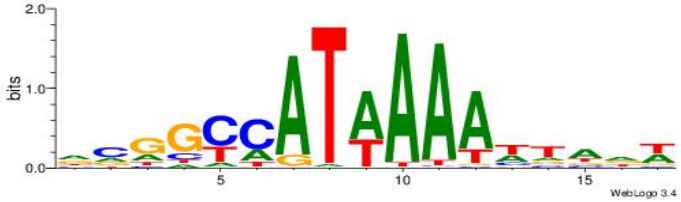


Motif ID:	UP00213
Motif name:	Hoxa9
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1

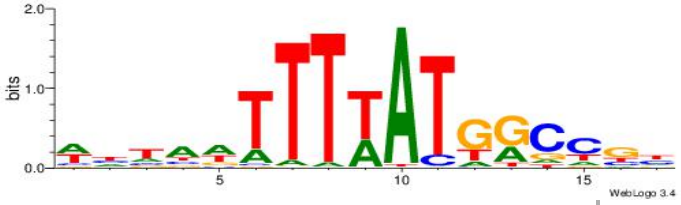
Number of overlap: 16
Similarity score: 0.0441221

Alignment:
WDTAWTTTWATGKCCGD
-YSWGTTCKAGGYCASY

Original motif
Consensus sequence: DCGGYCATWAAAWTADW

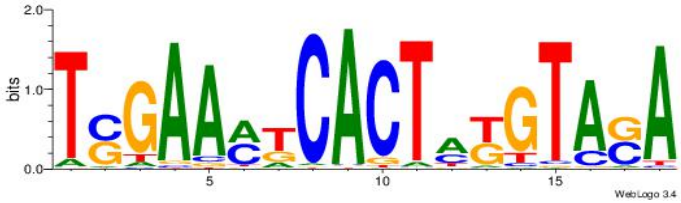


Reverse complement motif
Consensus sequence: WDTAWTTTWATGKCCGD

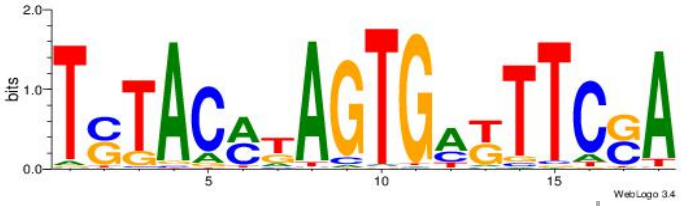


Dataset #: 1 Motif ID: 47 Motif name: C047

Original motif
Consensus sequence: TSGAAMTCACTMKGTASA



Reverse complement motif
Consensus sequence: TSTACRYAGTGAYTTCSA



Best Matches for Motif ID 47 (Highest to Lowest)

Motif ID: UP00528
Motif name: Foxm1_secondary
Species: Mus musculus

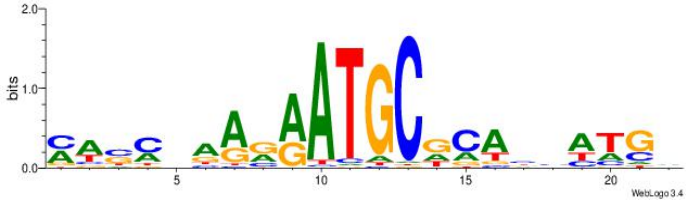
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	18
Similarity score:	0.0369958

Alignment:

```
DCATDBTGHGCATKMTTBRSWR
---TSGAAMTCACTMKGTASA-
```

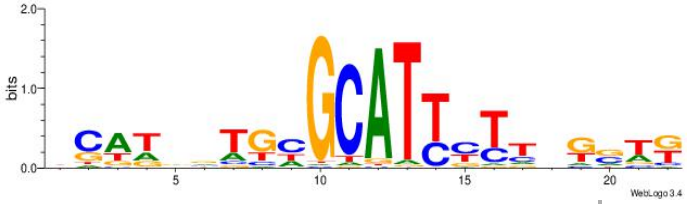
Original motif

Consensus sequence: MWSMBAARRATGCDCABHATGD



Reverse complement motif

Consensus sequence: DCATDBTGHGCATKMTTBRSWR



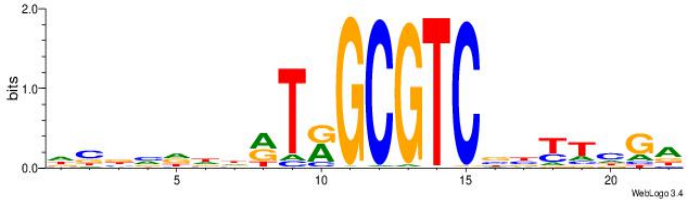
Motif ID:	UP00527
Motif name:	Foxn4_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	18
Similarity score:	0.045149

Alignment:

```
DBBVDDDRTRGCGTCBBYTHGA
----TSTACRYAGTGAYTTCSA
```

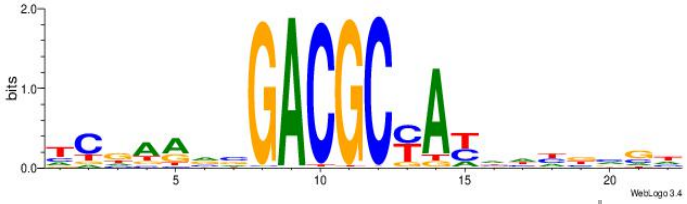
Original motif

Consensus sequence: DBBVDDDRTRGCGTCBBYTHGA



Reverse complement motif

Consensus sequence: TCDAMVBGACGCMAKDDDVBBD



Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	18
Similarity score:	0.0467709

Alignment:

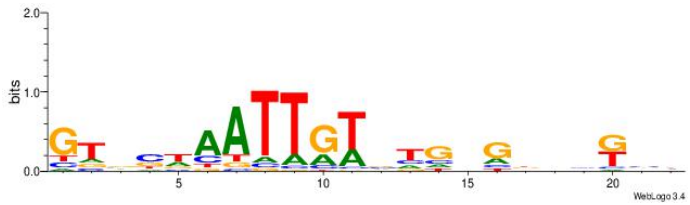
```
VVYDDDCHCAVACAATTDBVAC
--TSTACRYAGTGAYTTCSA--
```

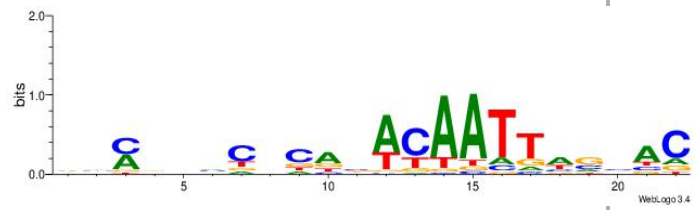
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB

Reverse complement motif

Consensus sequence: VVYDDDCHCAVACAATTDBVAC





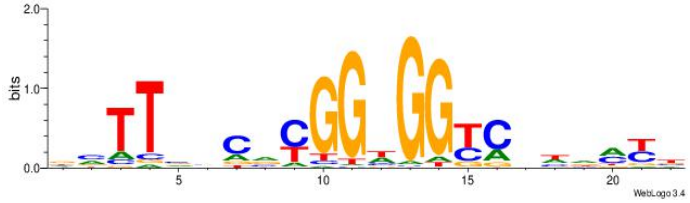
Motif ID:	UP00540
Motif name:	Gli3_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	18
Similarity score:	0.047063

Alignment:

```
DVTTVVCVYGGHGGYCHHDMYB
--TSTACRYAGTGAYTTCSA--
```

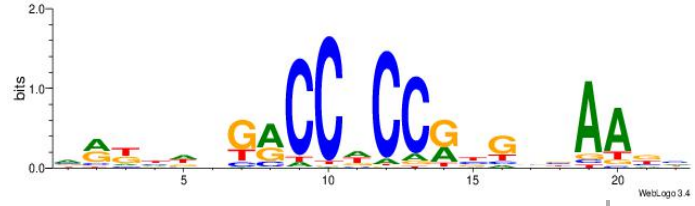
Original motif

Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



Reverse complement motif

Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH



Motif ID:	UP00098

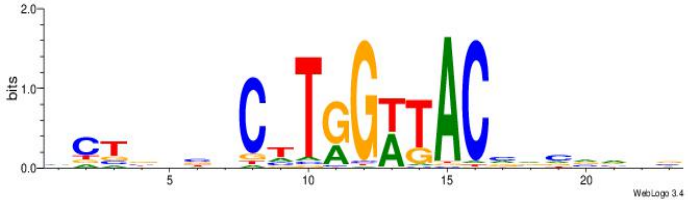
Motif name:	Rfx3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	18
Similarity score:	0.0479788

Alignment:

```
VCTBHBVCTTGGWTACVVVVVDB
-----TSGAAMTCACTMKGTASA
```

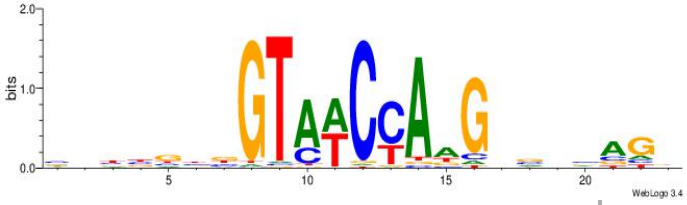
Original motif

Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB



Reverse complement motif

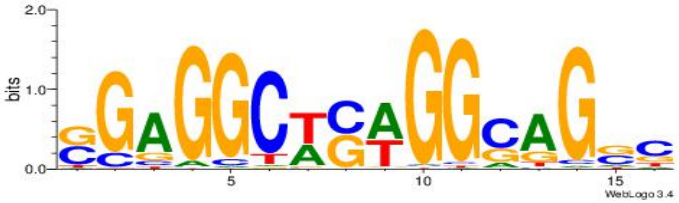
Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB



Dataset #: 1 Motif ID: 48 Motif name: C048

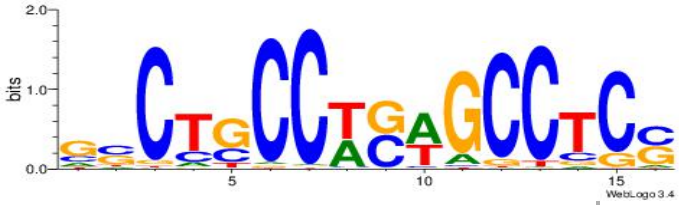
Original motif

Consensus sequence: SGAGGCWSWGGCAGSC



Reverse complement motif

Consensus sequence: GSCTGCCWSWGCCTCS



Best Matches for Motif ID 48 (Highest to Lowest)

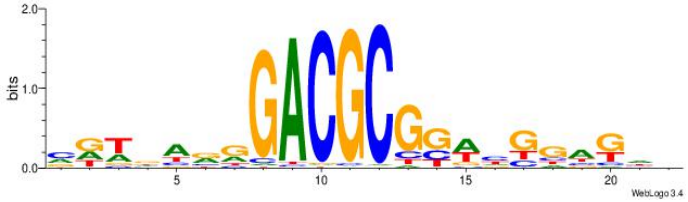
Motif ID:	UP00527
Motif name:	Foxn4_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	7
Number of overlap:	16
Similarity score:	0.0237024

Alignment:

```
VDWDARRGACGCGGWHGGAKHV
------SGAGGCWSWGGCAGSC
```

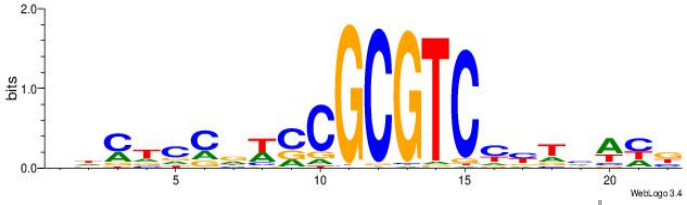
Original motif

Consensus sequence: VDWDARRGACGCGGWHGGAKHV



Reverse complement motif

Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV



Motif ID:	UP00539
Motif name:	Gli2_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement

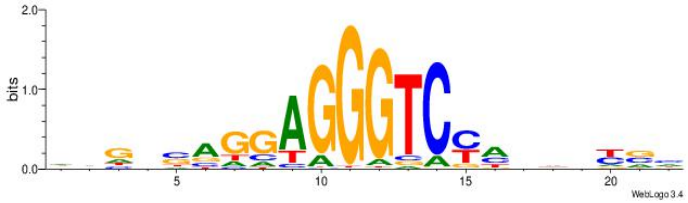
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	16
Similarity score:	0.0327172

Alignment:

```
DVMHHDHKGACCCTCCTSVCBH
GSCTGCCWSWGCCTCS------
```

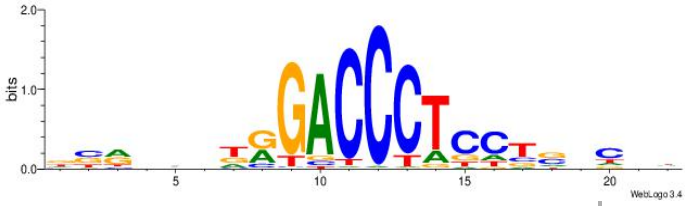
Original motif

Consensus sequence: HVGVSAGGAGGGTCYHHHHYVH



Reverse complement motif

Consensus sequence: DVMHHDHKGACCCTCCTSVCBH



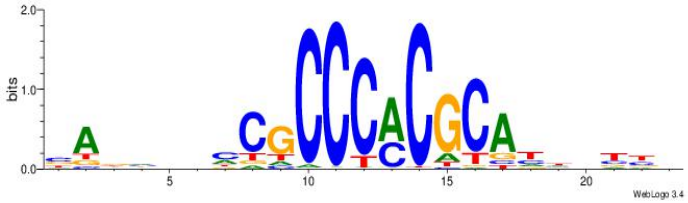
Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	16
Similarity score:	0.034796

Alignment:

VVVDHHTGCGYGGGCGDHVHHTB
---SGAGGCWSWGGCAGSC----

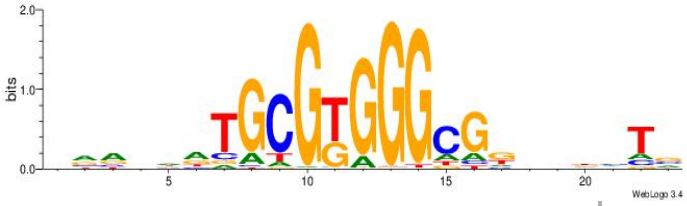
Original motif

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:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	16
Similarity score:	0.036242

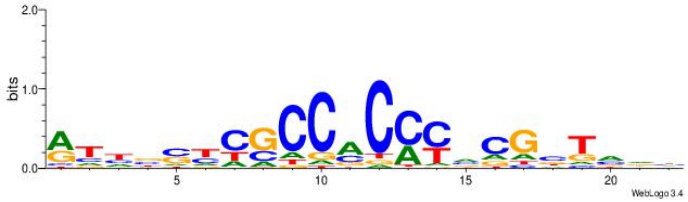
Alignment:
RTHBSYCGCCMCMYVCGBTVDH
---GSCTGCCWSWGCCTCS---

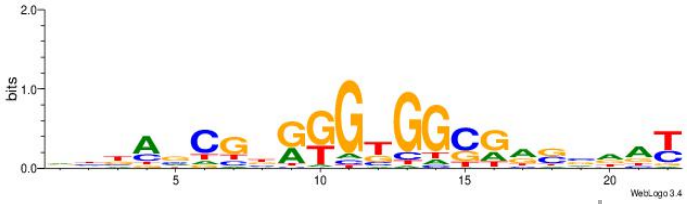
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH

Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK





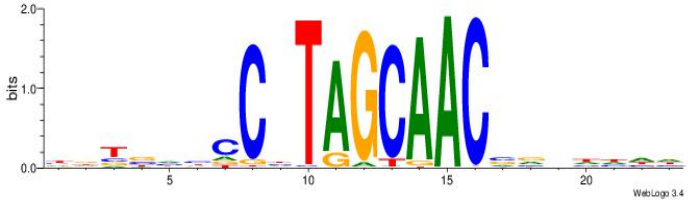
Motif ID:	UP00098
Motif name:	Rfx3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	16
Similarity score:	0.0393403

Alignment:

```
HDTBHHCCHTAGCAACVVDHHHH
-GSCTGCCWSWGCCTCS------
```

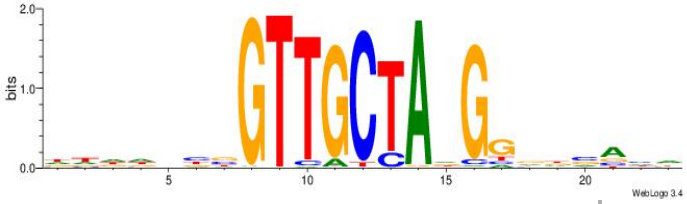
Original motif

Consensus sequence: HDTBHHCCHTAGCAACVVDHHHH



Reverse complement motif

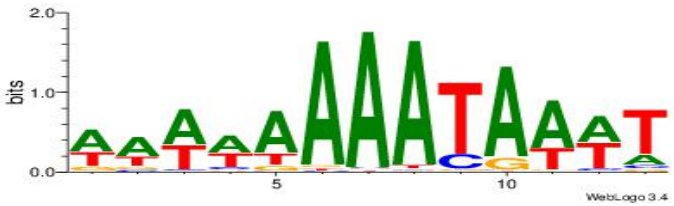
Consensus sequence: HHHHDVVGTTGCTAHGGDHBAHH



Dataset #: 1 Motif ID: 49 Motif name: C049

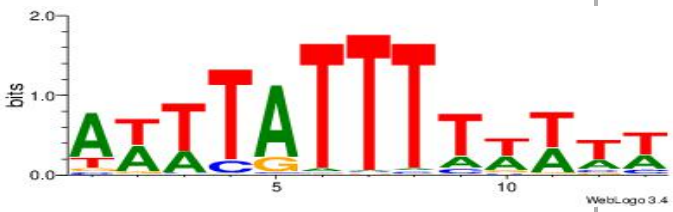
Original motif

Consensus sequence: WAWWAAAATAAWT



Reverse complement motif

Consensus sequence: AWTTATTTTWWTW



Best Matches for Motif ID 49 (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:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	13
Similarity score:	0.0235016

Alignment:

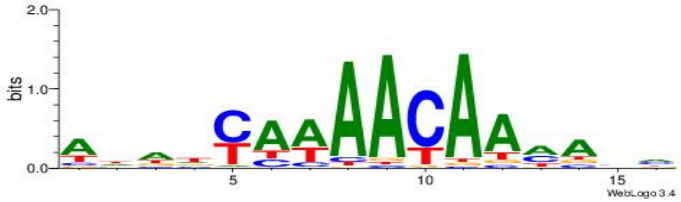
```
ADDDYAWAACAAMAHH
-WAWWAAAATAAWT--
```

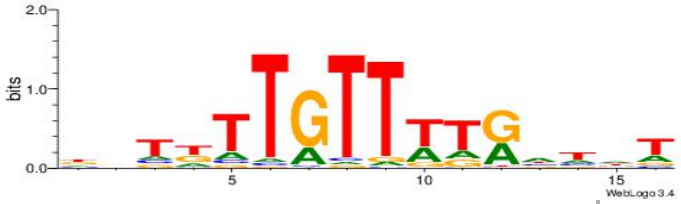
Original motif

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:	Forward
Position number:	3
Number of overlap:	13
Similarity score:	0.0251228

Alignment:

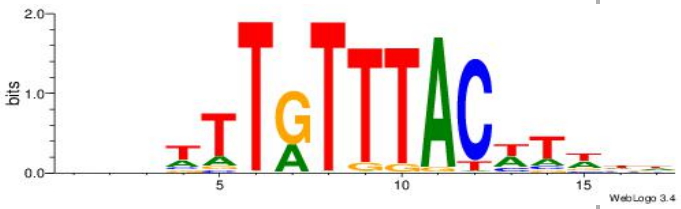
```
HHWAWGTAAAYAAAVDB
--WAWWAAAATAAWT--
```

Original motif

Consensus sequence: HHWAWGTAAAYAAAVDB

Reverse complement motif

Consensus sequence: BDVTTTKTTTACWTWHH



Motif ID:	UP00121

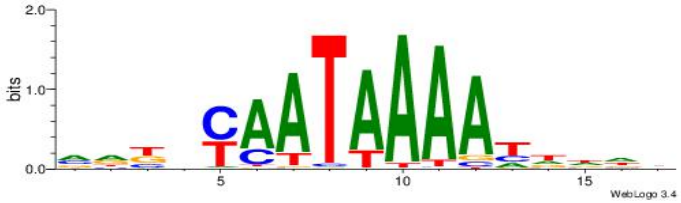
Motif name:	Hoxd10
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	13
Similarity score:	0.0269927

Alignment:

```
HDDDATTTTATTKVRDB
AWTTATTTTWWTW----
```

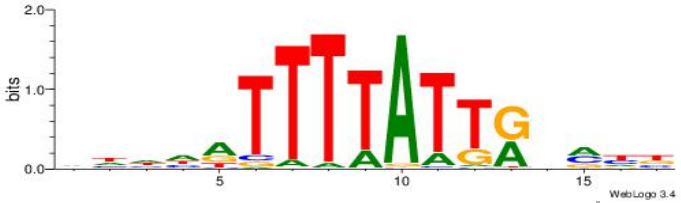
Original motif

Consensus sequence: VDKVYAATAAAATDDDH



Reverse complement motif

Consensus sequence: HDDDATTTTATTKVRDB

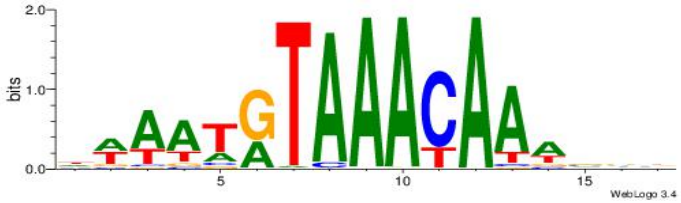


Motif ID:	UP00061
Motif name:	Foxl1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	13

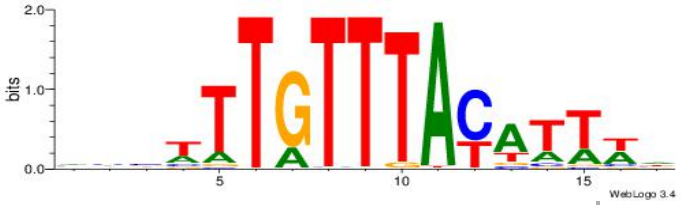
Similarity score: 0.0270626

Alignment:
DWAATRTAAACAAWVVB
--WAWWAAAATAAWT--

Original motif
Consensus sequence: DWAATRTAAACAAWVVB



Reverse complement motif
Consensus sequence: VVVWTTGTTTAMATTWD

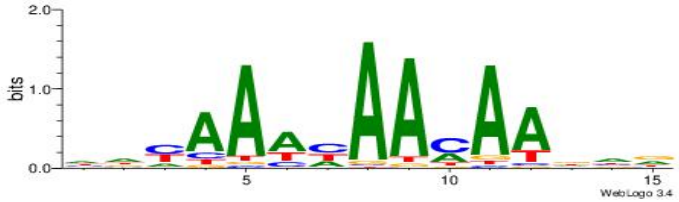


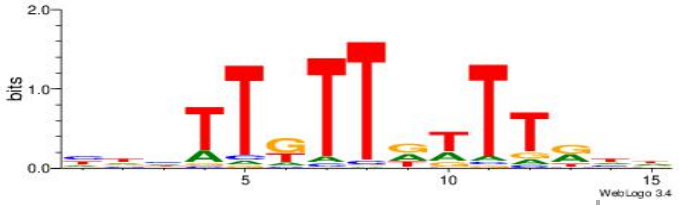
Motif ID: UP00037
Motif name: Zfp105_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 2
Number of overlap: 13
Similarity score: 0.0290157

Alignment:
HHHTTRTTDTTTKDH
-AWTTATTTTWWTW-

Original motif
Consensus sequence: HDYAAAHAAMAADHD

Reverse complement motif
Consensus sequence: HHHTTRTTDTTTKDH

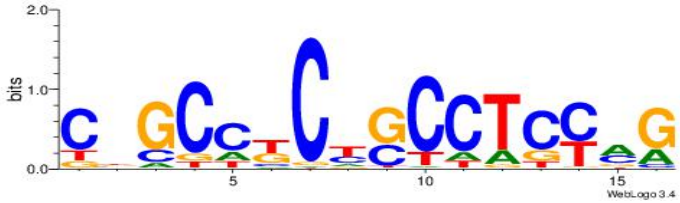




Dataset #: 1 **Motif ID: 50** **Motif name: C050**

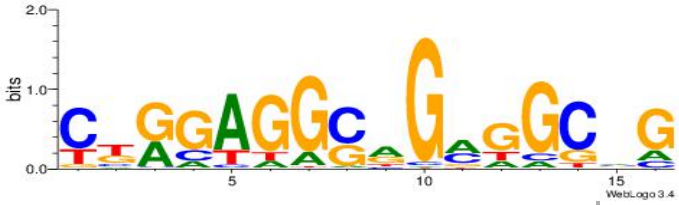
Original motif

Consensus sequence: CBGCCKCYSCCTCYMG



Reverse complement motif

Consensus sequence: CYKGAGGSMGRGGCVG



Best Matches for Motif ID 50 (Highest to Lowest)

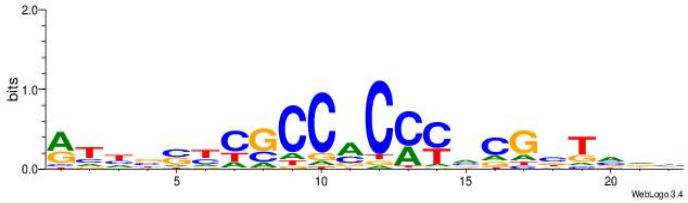
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	16
Similarity score:	0.0274857

Alignment:

RTHBSYCGCCMCMYVCGBTVDH
-----CBGCCKCYSCCTCYMG-

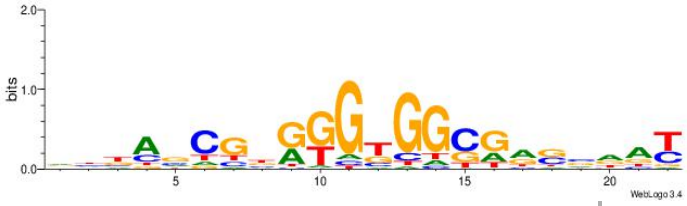
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



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:	3
Number of overlap:	16
Similarity score:	0.0294264

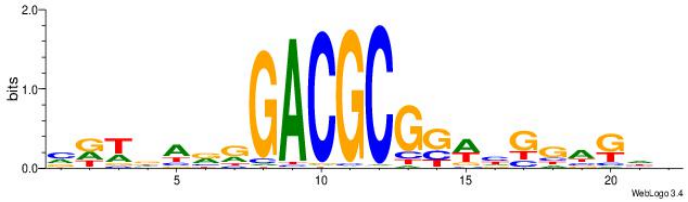
Alignment:
VHYTCCDWCCGCGTCMMTHWHV
--CBGCCKCYSCCTCYMG----

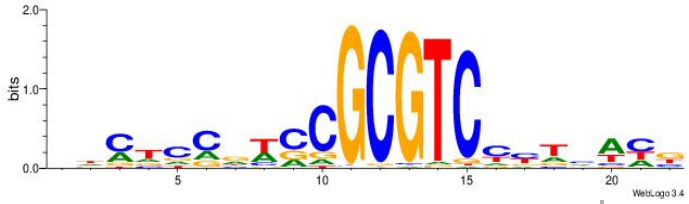
Original motif

Consensus sequence: VDWDARRGACGCGGWHGGAKHV

Reverse complement motif

Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV





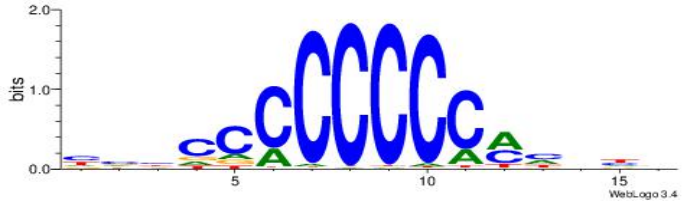
Motif ID:	UP00022
Motif name:	Zfp740_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	16
Similarity score:	0.0295783

Alignment:

```
BHHDYGGGGGGGGBVD
CYKGAGGSMGRGGCVG
```

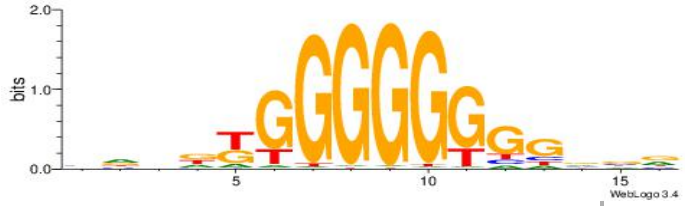
Original motif

Consensus sequence: HVBCCCCCCCCMHHHB



Reverse complement motif

Consensus sequence: BHHDYGGGGGGGGBVD



Motif ID:	UP00099
Motif name:	Ascl2_secondary

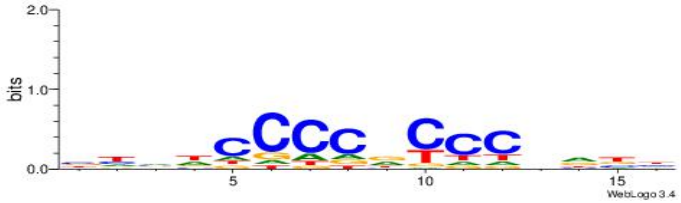
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	16
Similarity score:	0.0315534

Alignment:

```
HVDVGGGHGGGGDBHB
CYKGAGGSMGRGGCVG
```

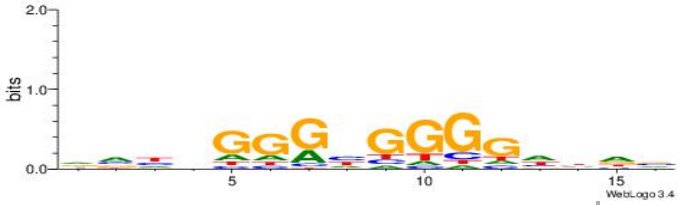
Original motif

Consensus sequence: BHVDCCCCDCCCBDBH



Reverse complement motif

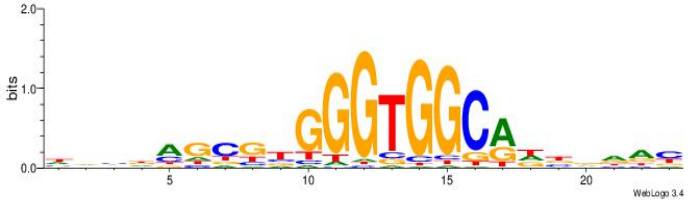
Consensus sequence: HVDVGGGHGGGGDBHB



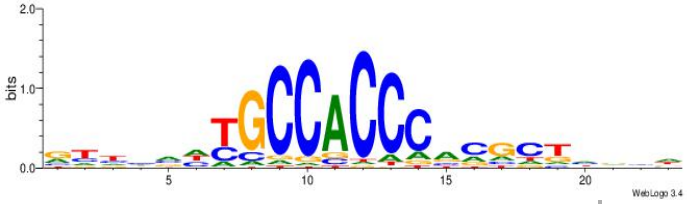
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	16
Similarity score:	0.0322386

Alignment:
BDDHVDKGCCACCCVCGCTDBVH
-----CBGCCKCYSCCTCYMG--

Original motif
Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB

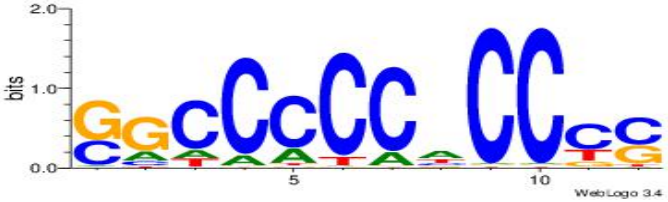


Reverse complement motif
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH

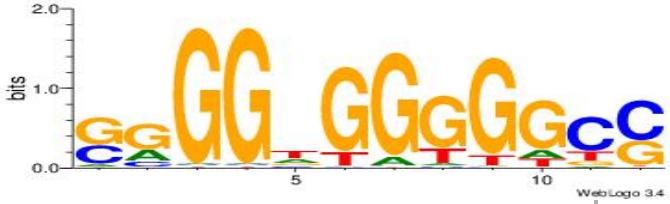


Dataset #: 1 Motif ID: 51 Motif name: C051

Original motif
Consensus sequence: SGCCCCCHCCCS



Reverse complement motif
Consensus sequence: SGGGHGGGGGCS



Best Matches for Motif ID 51 (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

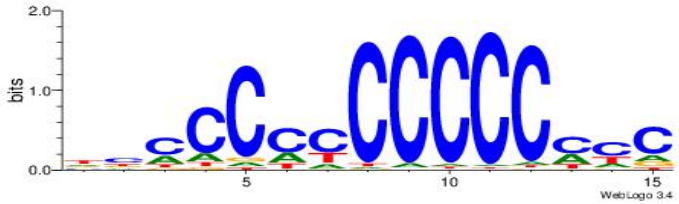
Direction:	Backward
Position number:	3
Number of overlap:	12
Similarity score:	0.00935805

Alignment:

```
DBCCCCCCCCCCMYC
-SGCCCCCHCCCS--
```

Original motif

Consensus sequence: DBCCCCCCCCCCMYC



Reverse complement motif

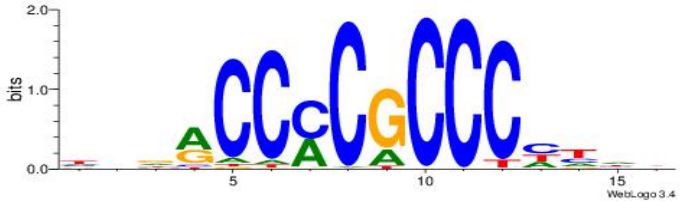
Consensus sequence: GKRGGGGGGGGGGBD

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:	Backward
Position number:	2
Number of overlap:	12
Similarity score:	0.0122535

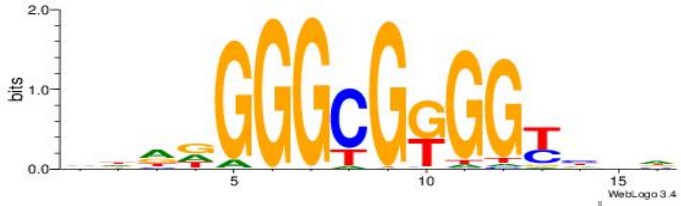
Alignment:

DHHDGGGCGRGGKHBH
---SGGGHGGGGGCS-

Original motif
Consensus sequence: HBDRCCMCGCCCHHHD



Reverse complement motif
Consensus sequence: DHHDGGGCGRGGKHBH

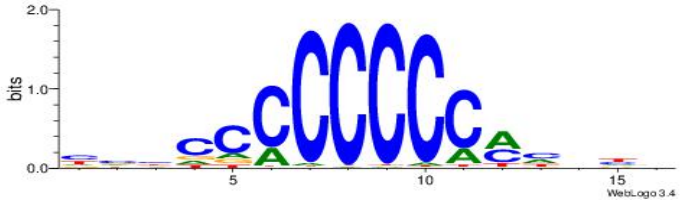


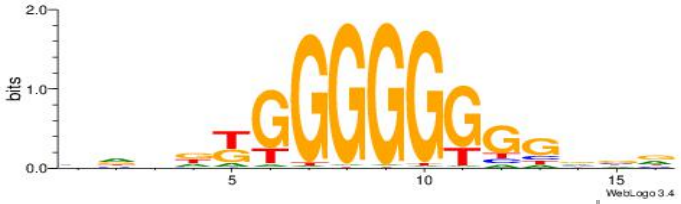
Motif ID:	UP00022
Motif name:	Zfp740_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	12
Similarity score:	0.0145224

Alignment:
HVBCCCCCCCCMHHHB
-SGCCCCCHCCCS---

Original motif
Consensus sequence: HVBCCCCCCCCMHHHB

Reverse complement motif
Consensus sequence: BHHDYGGGGGGGGBVD





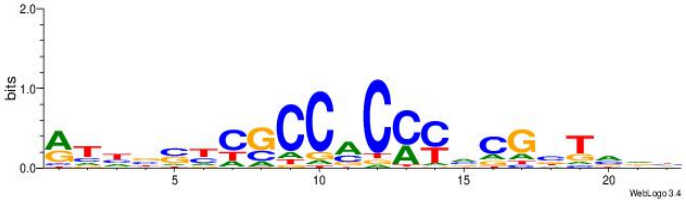
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	12
Similarity score:	0.0145616

Alignment:

```
RTHBSYCGCCMCMYVCGBTVDH
---SGCCCCCHCCCS-------
```

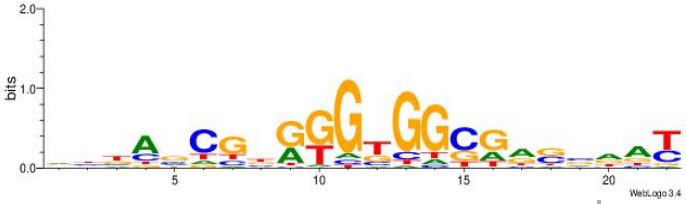
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



Motif ID:	UP00540

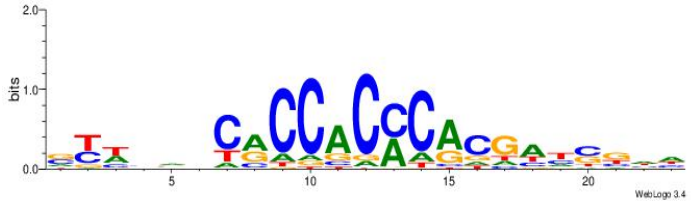
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	9
Number of overlap:	12
Similarity score:	0.0226961

Alignment:

```
VYWVVHCRCCACMCACGAHSBHH
---SGCCCCCHCCCS--------
```

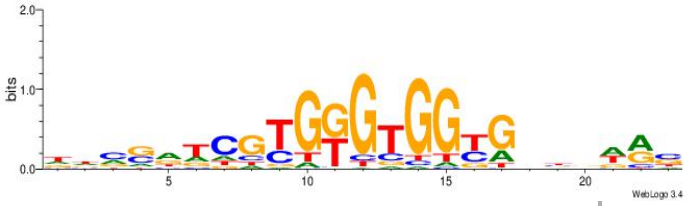
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



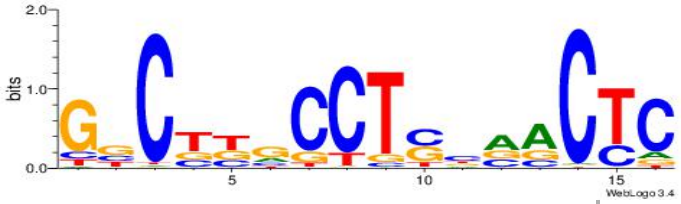
Dataset #: 1 Motif ID: 52 Motif name: C052

Original motif

Consensus sequence: GAGTBVSAGGCMAGVC

Reverse complement motif

Consensus sequence: GVCTYGCCTSVVACTC



Best Matches for Motif ID 52 (Highest to Lowest)

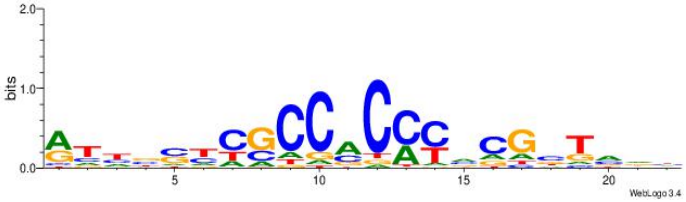
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	16
Similarity score:	0.0423398

Alignment:

```
HDBABCGBKRGYGGCGMSBHAK
----GAGTBVSAGGCMAGVC--
```

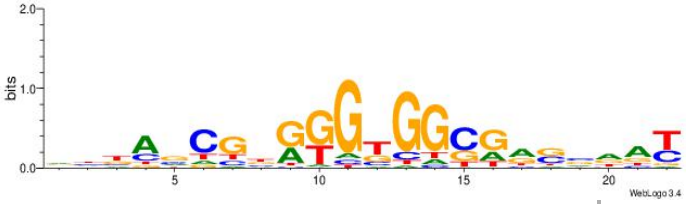
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



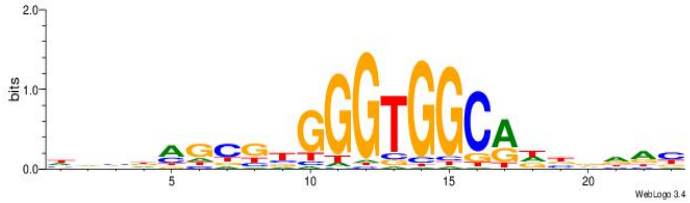
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	16
Similarity score:	0.047746

Alignment:

```
BDDHVDKGCCACCCVCGCTDBVH
--GVCTYGCCTSVVACTC-----
```

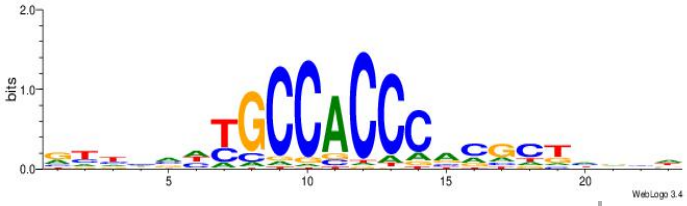
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH

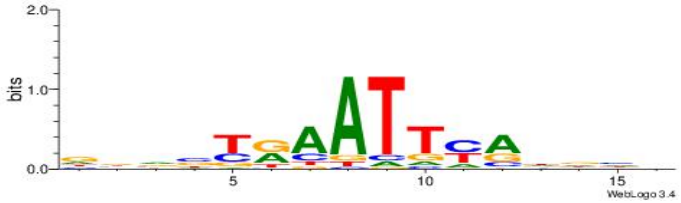


Motif ID:	UP00064
Motif name:	Sox18_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1

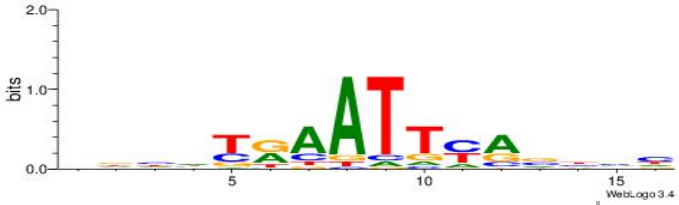
Number of overlap: 16
Similarity score: 0.0490125

Alignment:
DBVBTRAATTYADDHV
GAGTBVSAGGCMAGVC

Original motif
Consensus sequence: DBVBTRAATTYADDHV



Reverse complement motif
Consensus sequence: VDHDTKAATTMABBBH



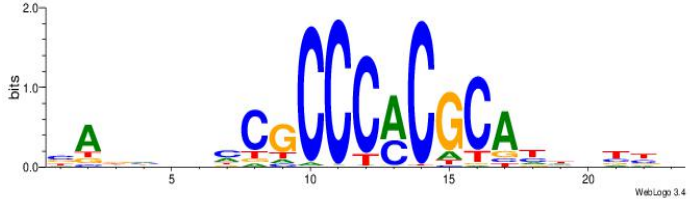
Motif ID: UP00400
Motif name: Zif268
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 8
Number of overlap: 16
Similarity score: 0.0499529

Alignment:
BADHBDHCGCCCMCGCAHHDBBV
GVCTYGCCTSVVACTC-------

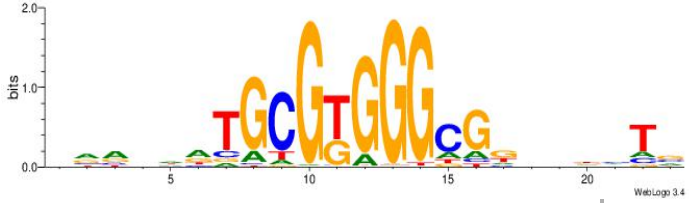
Original motif

Reverse complement motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB



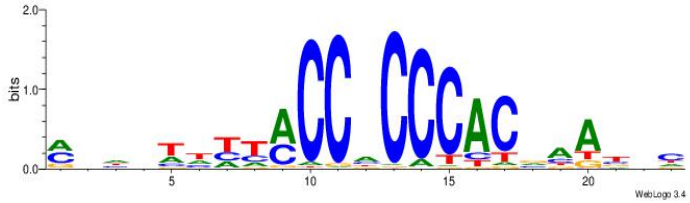
Motif ID:	UP00538
Motif name:	Gli1_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	16
Similarity score:	0.0535021

Alignment:

```
DVVTTVGTGGGHGGYAMHWHHHY
GAGTBVSAGGCMAGVC-------
```

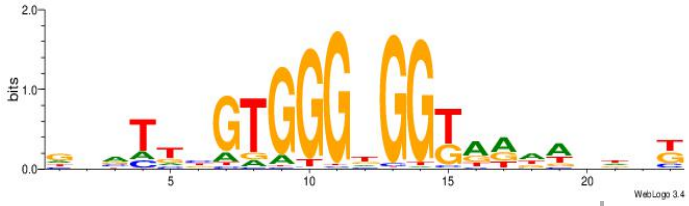
Original motif

Consensus sequence: MHHHWHYTMCCHCCCACVAABVH



Reverse complement motif

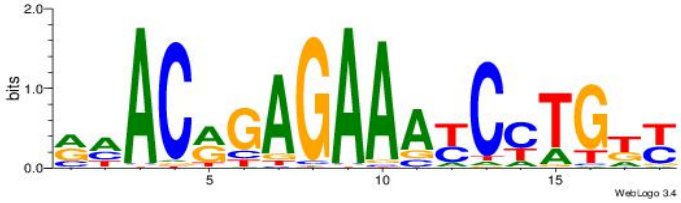
Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY



Dataset #: 1 **Motif ID: 53** **Motif name: C053**

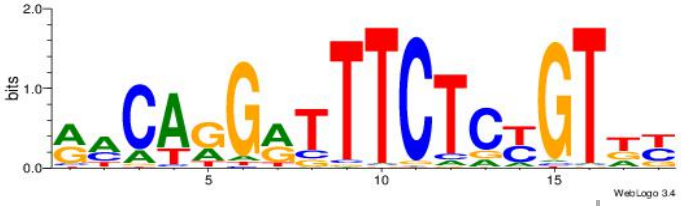
Original motif

Consensus sequence: RMACRGAGAAAYCCTGKY



Reverse complement motif

Consensus sequence: MRCAGGMTTTCTCKGTYK



Best Matches for Motif ID 53 (Highest to Lowest)

Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	18
Similarity score:	0.0388232

Alignment:

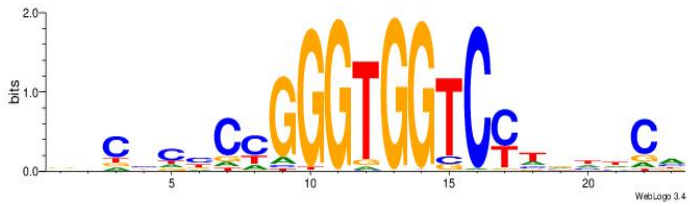
```
HGDHVHKGACCACCCGGBGBGDB
--MRCAGGMTTTCTCKGTYK---
```

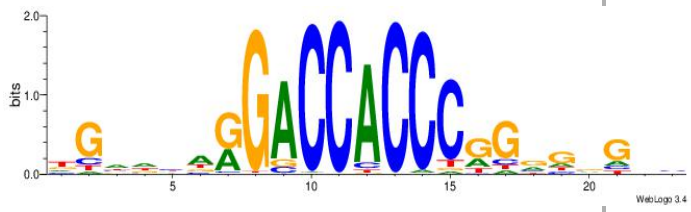
Original motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH

Reverse complement motif

Consensus sequence: HGDHVHKGACCACCCGGBGBGDB





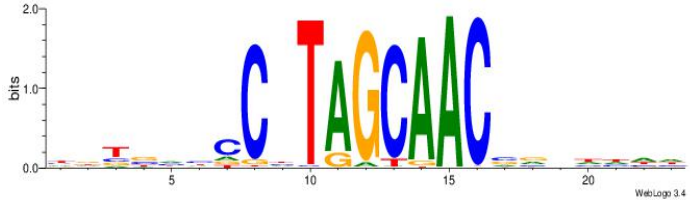
Motif ID:	UP00098
Motif name:	Rfx3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	18
Similarity score:	0.0410442

Alignment:

```
HDTBHHCCHTAGCAACVVDHHHH
----RMACRGAGAAAYCCTGKY-
```

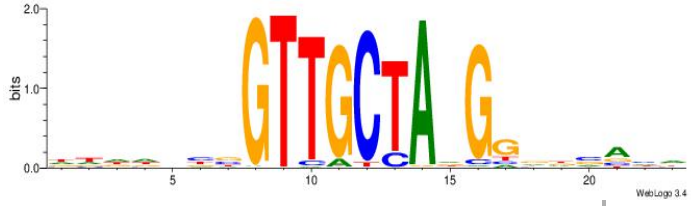
Original motif

Consensus sequence: HDTBHHCCHTAGCAACVVDHHHH



Reverse complement motif

Consensus sequence: HHHHDVVGTTGCTAHGGDHBAHH



Motif ID:	UP00526

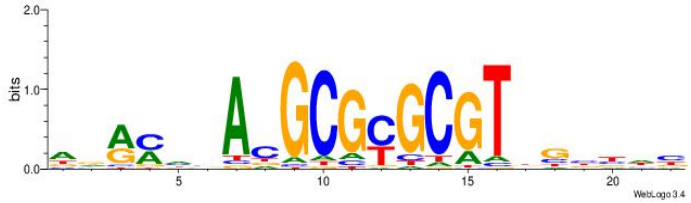
Motif name:	Foxn1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	18
Similarity score:	0.0413339

Alignment:

```
DDRMHBACGCGYGCGTDGBBDB
---MRCAGGMTTTCTCKGTYK-
```

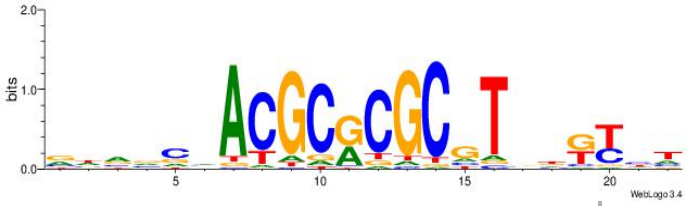
Original motif

Consensus sequence: DDRMHBACGCGYGCGTDGBBDB



Reverse complement motif

Consensus sequence: BDVBCDACGCKCGCGTBHRKHD

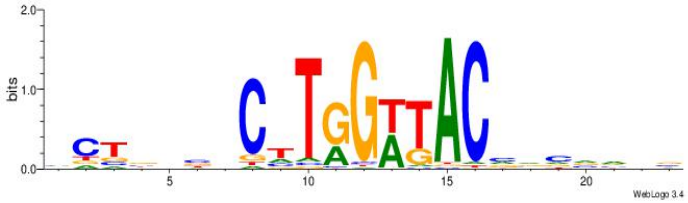


Motif ID:	UP00098
Motif name:	Rfx3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	18

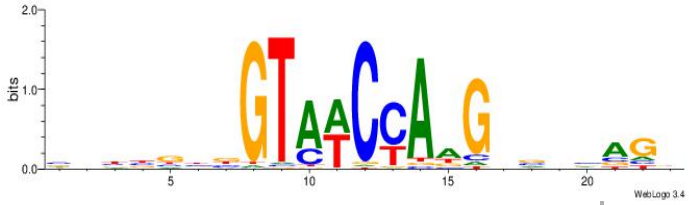
Similarity score: 0.0440408

Alignment:
BDBBVBVGTAWCCAAGVBHBAGB
RMACRGAGAAAYCCTGKY-----

Original motif
Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB



Reverse complement motif
Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB

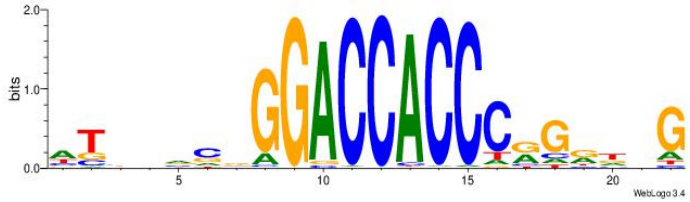


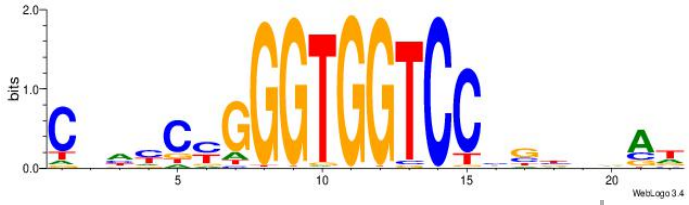
Motif ID: UP00539
Motif name: Gli2_v015681_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 4
Number of overlap: 18
Similarity score: 0.0442508

Alignment:
CBDMCMGGGTGGTCCHVBVBAH
-RMACRGAGAAAYCCTGKY---

Original motif
Consensus sequence: HTBVVVDGGACCACCCRGRDBG

Reverse complement motif
Consensus sequence: CBDMCMGGGTGGTCCHVBVBAH

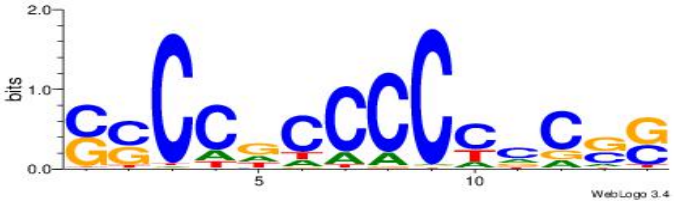




Dataset #: 1 **Motif ID: 54** **Motif name: C054**

Original motif

Consensus sequence: SSCCDCCCCCCCSS



Reverse complement motif

Consensus sequence: SSGGGGGGGHGGSS

Best Matches for Motif ID 54 (Highest to Lowest)

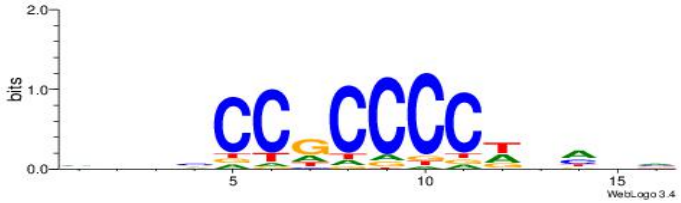
Motif ID:	UP00043
Motif name:	Bcl6b_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	14
Similarity score:	0.0162118

Alignment:

HBBBCCGCCCCWHHHV
--SSCCDCCCCCCCSS

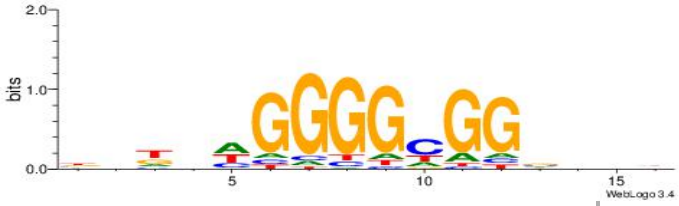
Original motif

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:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	14
Similarity score:	0.0185646

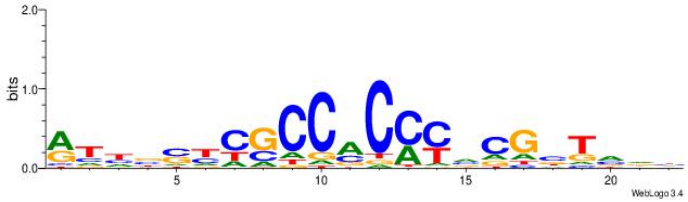
Alignment:
RTHBSYCGCCMCMYVCGBTVDH
---SSCCDCCCCCCCSS-----

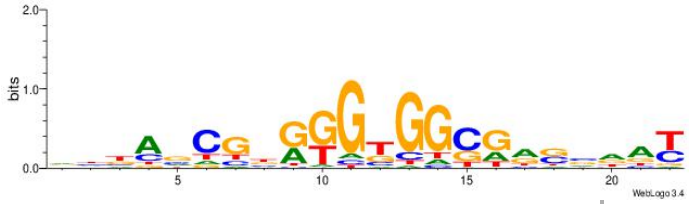
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH

Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK





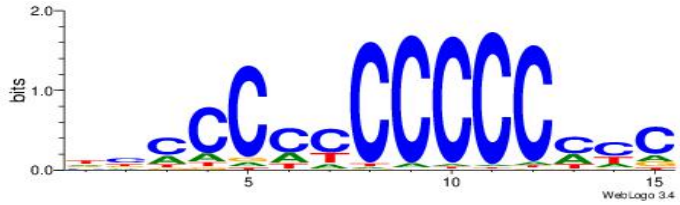
Motif ID:	UP00021
Motif name:	Zfp281_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	14
Similarity score:	0.0201409

Alignment:

```
DBCCCCCCCCCCMYC
-SSCCDCCCCCCCSS
```

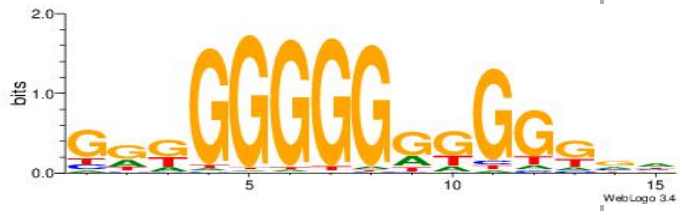
Original motif

Consensus sequence: DBCCCCCCCCCCMYC



Reverse complement motif

Consensus sequence: GKRGGGGGGGGGBD



Motif ID:	UP00033

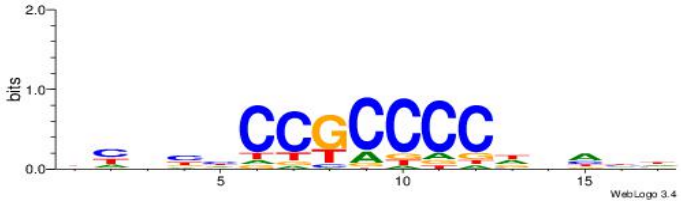
Motif name:	Zfp410_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0221949

Alignment:

```
HHHHDGGGGCGGDBHDV
SSGGGGGGGHGGSS---
```

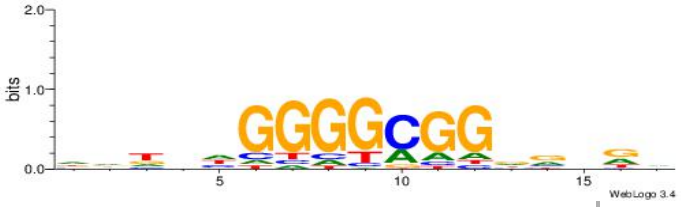
Original motif

Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif

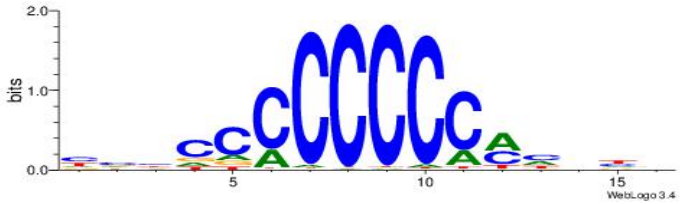
Consensus sequence: HHHHDGGGGCGGDBHDV



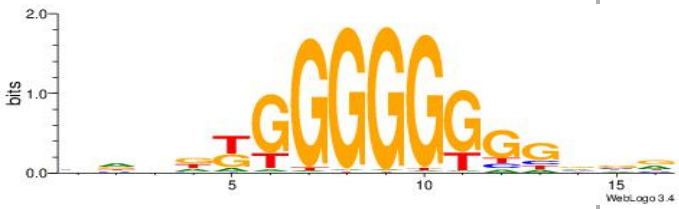
Motif ID:	UP00022
Motif name:	Zfp740_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0265213

Alignment:
HVBCCCCCCCCMHHHB
-SSCCDCCCCCCCSS-

Original motif
Consensus sequence: HVBCCCCCCCCMHHHB

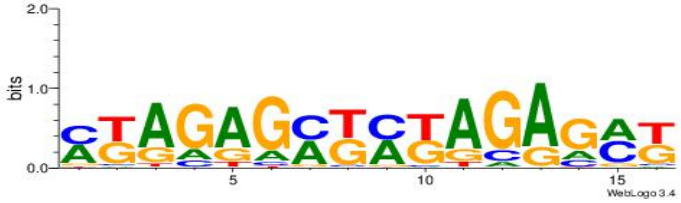


Reverse complement motif
Consensus sequence: BHHDYGGGGGGGGBVD

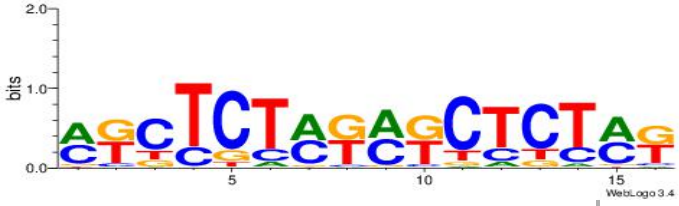


Dataset #: 1 Motif ID: 55 Motif name: C055

Original motif
Consensus sequence: MKAGAGMKMKAGAGMK



Reverse complement motif
Consensus sequence: RYCTCTRRRRCTCTRR



Best Matches for Motif ID 55 (Highest to Lowest)

Motif ID:	UP00101
Motif name:	Sox12_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif

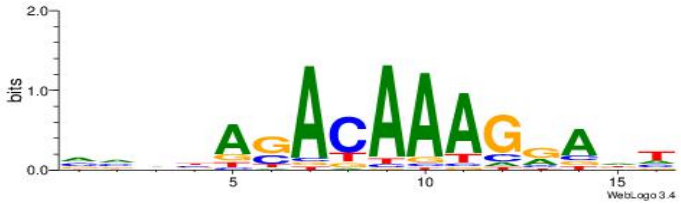
Direction:	Backward
Position number:	1
Number of overlap:	16
Similarity score:	0.039204

Alignment:

```
VVDBASACAAAGRADH
MKAGAGMKMKAGAGMK
```

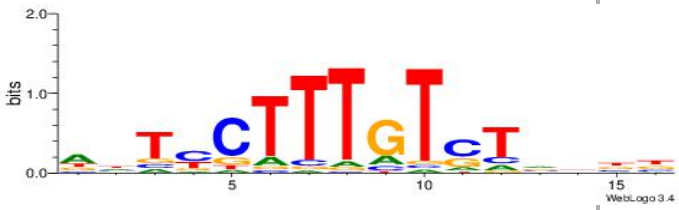
Original motif

Consensus sequence: VVDBASACAAAGRADH



Reverse complement motif

Consensus sequence: HDTMCTTTGTSTVDBB



Motif ID:	UP00080
Motif name:	Gata5_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	16
Similarity score:	0.0398738

Alignment:

VVBHRAGATATCWDHBB
-MKAGAGMKMKAGAGMK

Original motif

Consensus sequence: VVBHRAGATATCWDHBB

Reverse complement motif

Consensus sequence: VVHHWGATATCTMHBBV

Motif ID:	UP00019
Motif name:	Zbtb12_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	16
Similarity score:	0.0427919

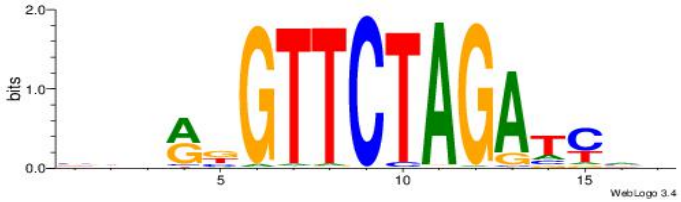
Alignment:
BBGATCTAGAACBKHDB
-RYCTCTRRRRCTCTRR

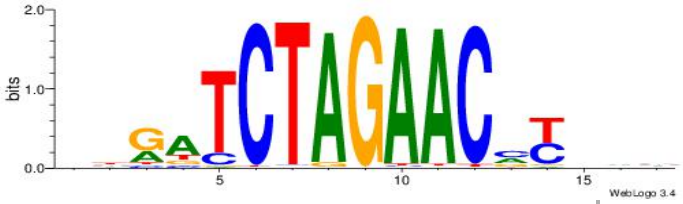
Original motif

Consensus sequence: BDHRBGTTCTAGATCVB

Reverse complement motif

Consensus sequence: BBGATCTAGAACBKHDB





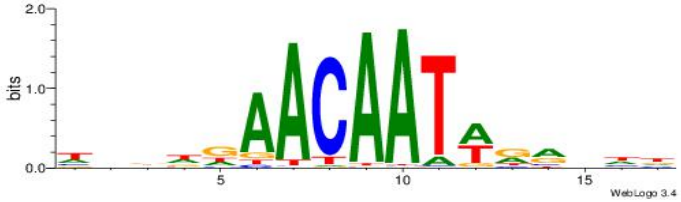
Motif ID:	UP00075
Motif name:	Sox15_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	16
Similarity score:	0.0433178

Alignment:

```
HDDDDAACAATWRRBHD
-MKAGAGMKMKAGAGMK
```

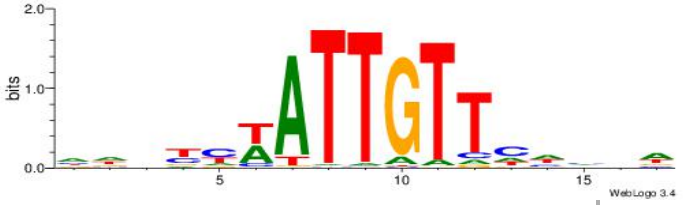
Original motif

Consensus sequence: HDDDDAACAATWRRBHD



Reverse complement motif

Consensus sequence: DHVKMWATTGTTHDHDH



Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary

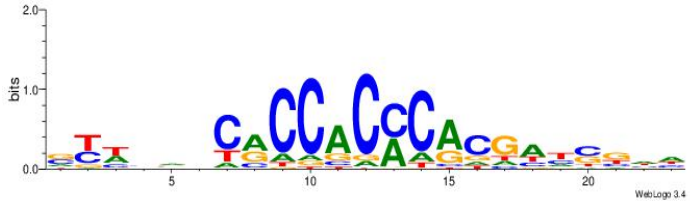
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8
Number of overlap:	16
Similarity score:	0.0454282

Alignment:

```
VYWVVHCRCCACMCACGAHSBHH
-------RYCTCTRRRRCTCTRR
```

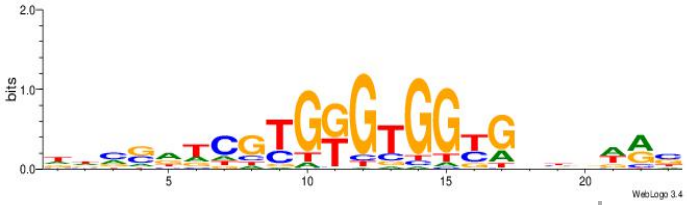
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

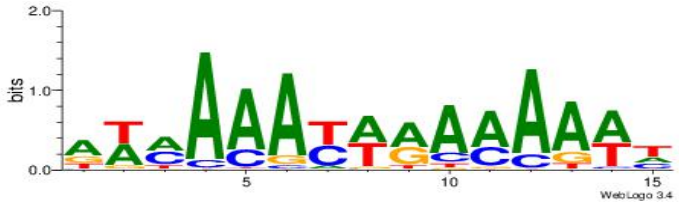
Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



Dataset #: 1 Motif ID: 56 Motif name: C056

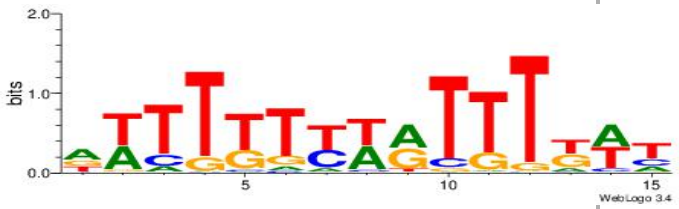
Original motif

Consensus sequence: AWMAAAYWRAMAAWH



Reverse complement motif

Consensus sequence: HWTTYTKWMTTTYWT



Best Matches for Motif ID 56 (Highest to Lowest)

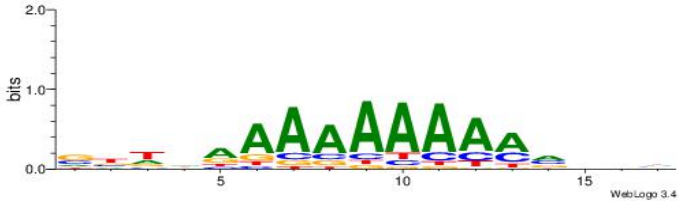
Motif ID:	UP00077
Motif name:	Srf_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	15
Similarity score:	0.0213582

Alignment:

```
HHVBYTTTTTTTTDDVV
-HWTTYTKWMTTTYWT-
```

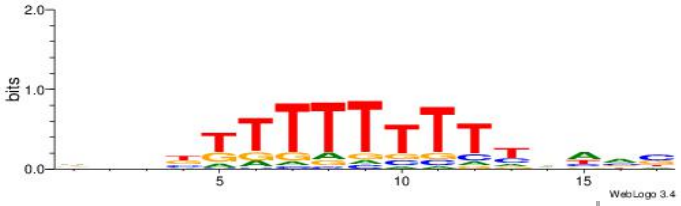
Original motif

Consensus sequence: VBDDAAAAAAAAMVBHH



Reverse complement motif

Consensus sequence: HHVBYTTTTTTTTDDVV



Motif ID:	UP00037
Motif name:	Zfp105_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif

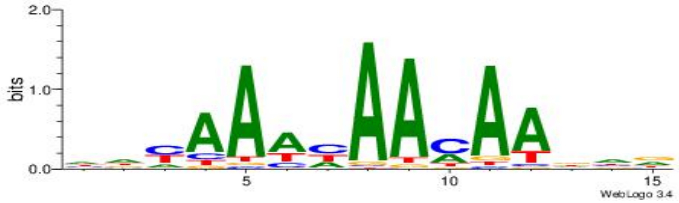
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	15
Similarity score:	0.0251847

Alignment:

```
HDYAAAHAAMAADHD
AWMAAAYWRAMAAWH
```

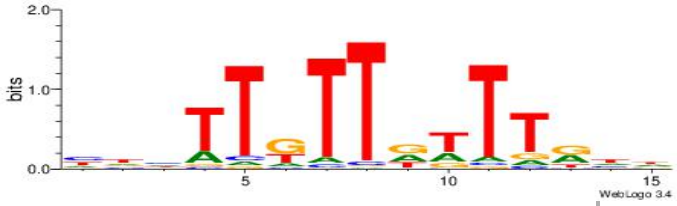
Original motif

Consensus sequence: HDYAAAHAAMAADHD



Reverse complement motif

Consensus sequence: HHHTTRTTDTTTKDH



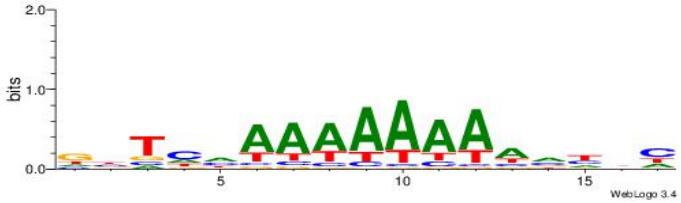
Motif ID:	UP00090
Motif name:	Elf3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	15
Similarity score:	0.0274993

Alignment:

DBTHHAAAAAAAAVHDH
-AWMAAAYWRAMAAWH-

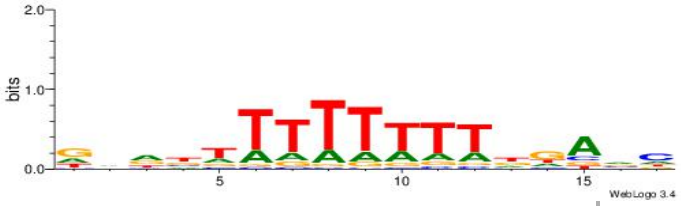
Original motif

Consensus sequence: DBTHHAAAAAAAAVHDH



Reverse complement motif

Consensus sequence: DDHBTTTTTTTTHDAVH



Motif ID:	UP00255
Motif name:	Dbx1
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:	0.027785

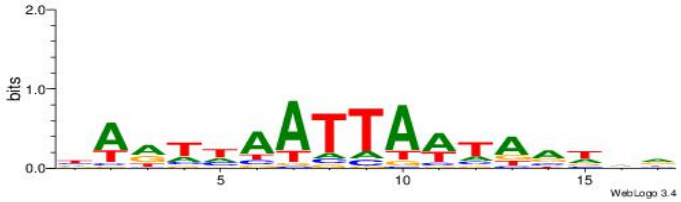
Alignment:
HARTHAATTAWTAVDHD
-AWMAAAYWRAMAAWH-

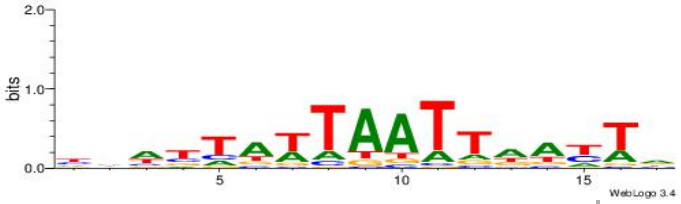
Original motif

Consensus sequence: HARTHAATTAWTAVDHD

Reverse complement motif

Consensus sequence: DHDBTAWTAATTHAKTH





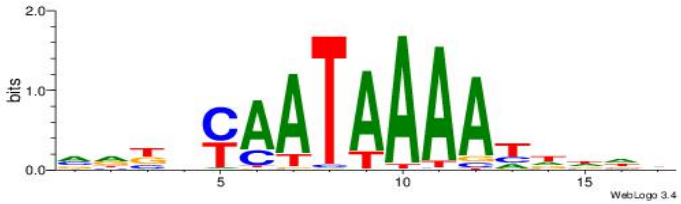
Motif ID:	UP00121
Motif name:	Hoxd10
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	15
Similarity score:	0.02926

Alignment:

```
HDDDATTTTATTKVRDB
-HWTTYTKWMTTTYWT-
```

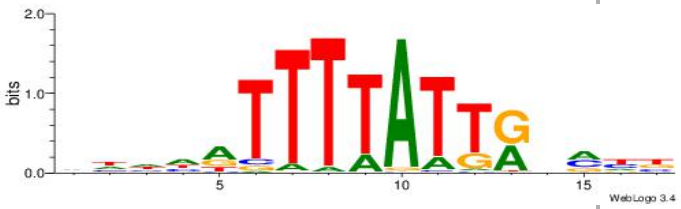
Original motif

Consensus sequence: VDKVYAATAAAATDDDH



Reverse complement motif

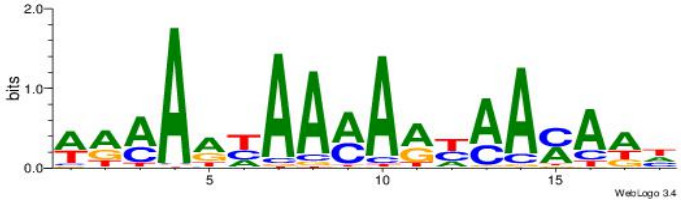
Consensus sequence: HDDDATTTTATTKVRDB



Dataset #: 1 Motif ID: 57 Motif name: C057

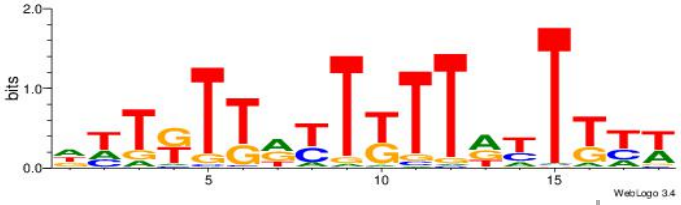
Original motif

Consensus sequence: WRMARYAAMARYAAMAWH



Reverse complement motif

Consensus sequence: HWTRTTMKTYTTMKTYKW



Best Matches for Motif ID 57 (Highest to Lowest)

Motif ID:	UP00034
Motif name:	Sox7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	18
Similarity score:	0.0381479

Alignment:

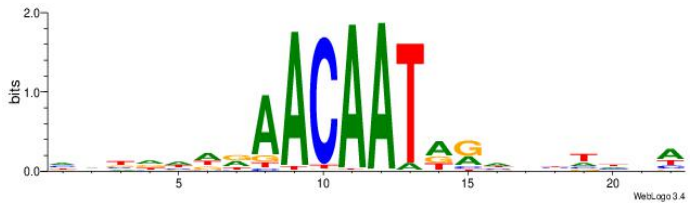
```
HHBDHDDAACAATDRHHHHHBW
-WRMARYAAMARYAAMAWH---
```

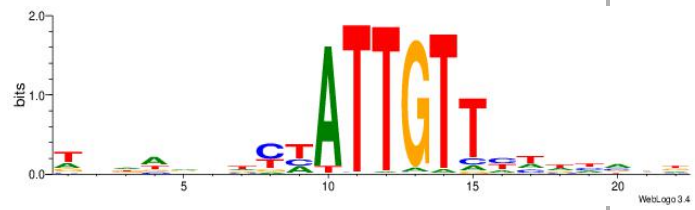
Original motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW

Reverse complement motif

Consensus sequence: WBHHHHHMDATTGTTHDHDVHH





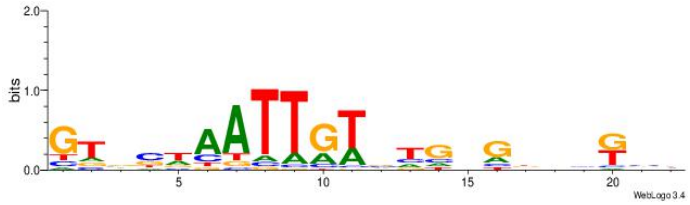
Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	18
Similarity score:	0.052401

Alignment:

```
VVYDDDCHCAVACAATTDBVAC
----WRMARYAAMARYAAMAWH
```

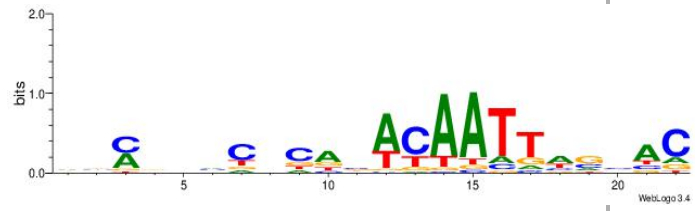
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif

Consensus sequence: VVYDDDCHCAVACAATTDBVAC



Motif ID:	UP00528

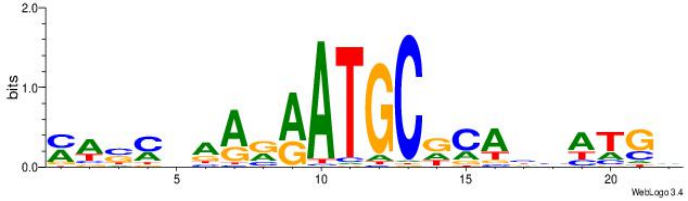
Motif name:	Foxm1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	18
Similarity score:	0.0540821

Alignment:

```
DCATDBTGHGCATKMTTBRSWR
--HWTRTTMKTYTTMKTYKW--
```

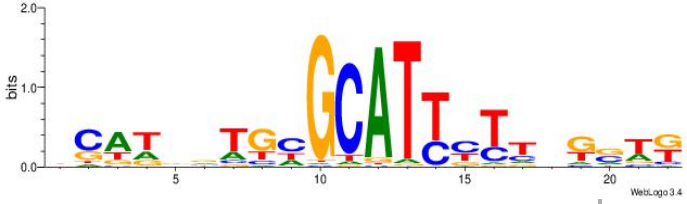
Original motif

Consensus sequence: MWSMBAARRATGCDCABHATGD



Reverse complement motif

Consensus sequence: DCATDBTGHGCATKMTTBRSWR

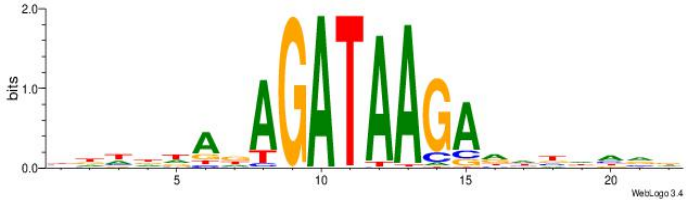


Motif ID:	UP00032
Motif name:	Gata3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	18

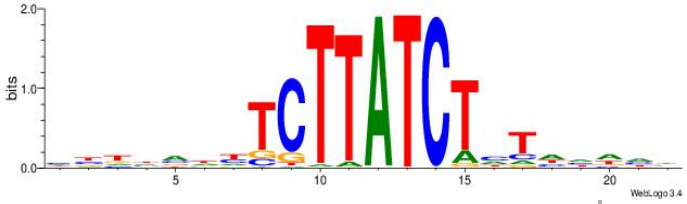
Similarity score: 0.0542401

Alignment:
HBHDVHDTCTTATCTHTDDHDV
--HWTRTTMKTYTTMKTYKW--

Original motif
Consensus sequence: BDHDDADAGATAAGADHBDHVD



Reverse complement motif
Consensus sequence: HBHDVHDTCTTATCTHTDDHDV

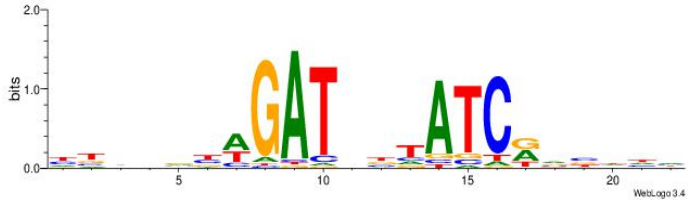


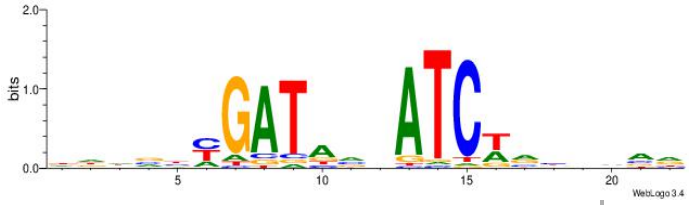
Motif ID: UP00032
Motif name: Gata3_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 4
Number of overlap: 18
Similarity score: 0.0552305

Alignment:
HHHBBMGATAVHATCWVVDHVH
---WRMARYAAMARYAAMAWH-

Original motif
Consensus sequence: HBHDVBWGATHBTATCRVBHHH

Reverse complement motif
Consensus sequence: HHHBBMGATAVHATCWVVDHVH

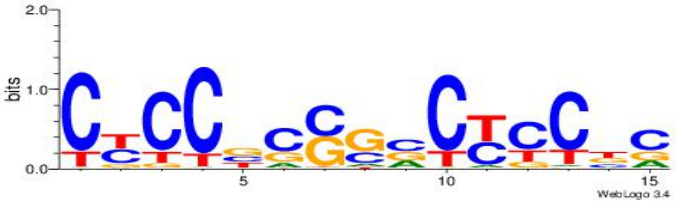




Dataset #: 1 **Motif ID: 58** **Motif name: C058**

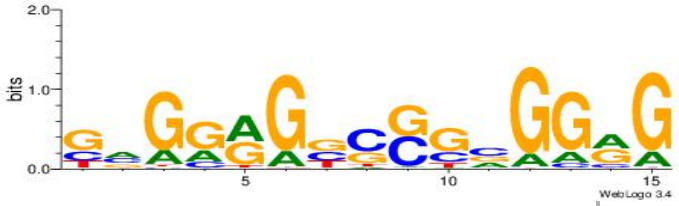
Original motif

Consensus sequence: CYCCBCSGVCYCCBC



Reverse complement motif

Consensus sequence: GVGGMGVCSGBGGMG



Best Matches for Motif ID 58 (Highest to Lowest)

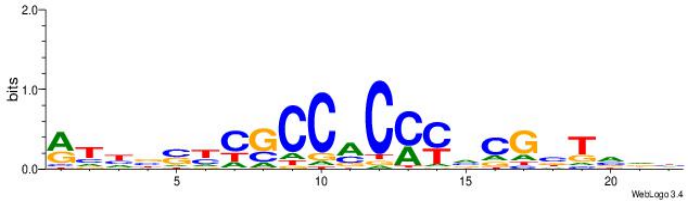
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	15
Similarity score:	0.0246506

Alignment:

HDBABCGBKRGYGGCGMSBHAK
-GVGGMGVCSGBGGMG------

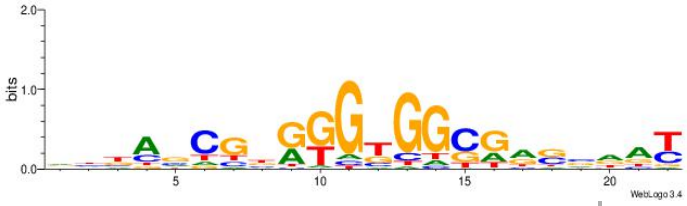
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



Motif ID:	UP00036
Motif name:	Myf6_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:	0.0266507

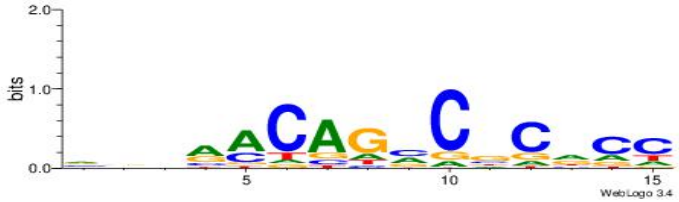
Alignment:
GGDGBGVCTGTKVVB
GVGGMGVCSGBGGMG

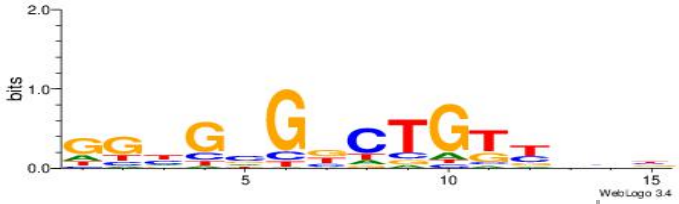
Original motif

Consensus sequence: VVVRACAGVCBCDCC

Reverse complement motif

Consensus sequence: GGDGBGVCTGTKVVB





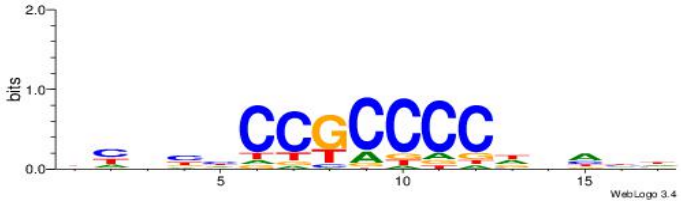
Motif ID:	UP00033
Motif name:	Zfp410_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	15
Similarity score:	0.0296277

Alignment:

```
BHHBHCCGCCCCDHHHH
CYCCBCSGVCYCCBC--
```

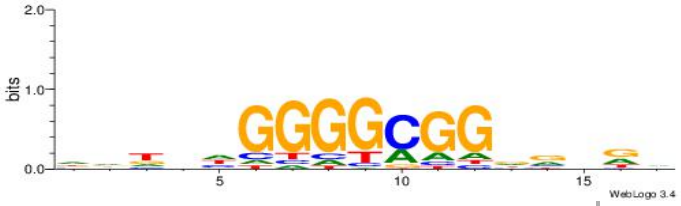
Original motif

Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif

Consensus sequence: HHHHDGGGGCGGDBHDV



Motif ID:	UP00002
Motif name:	Sp4_primary

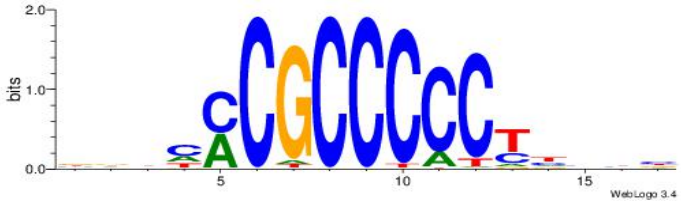
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	15
Similarity score:	0.0309574

Alignment:

```
BDHHMCGCCCCCTHVBB
--CYCCBCSGVCYCCBC
```

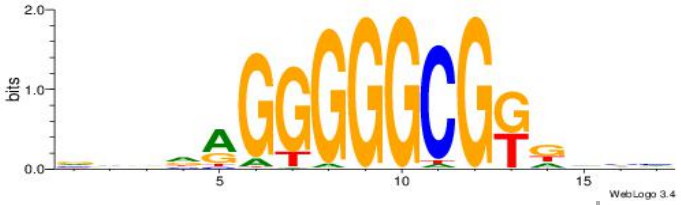
Original motif

Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif

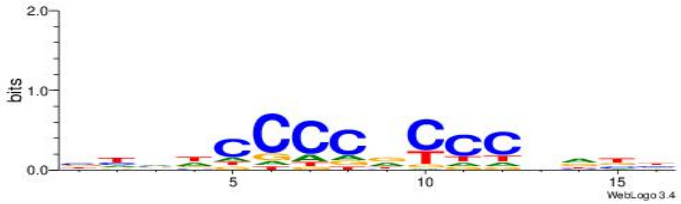
Consensus sequence: BVVHAGGGGGCGRDHHB



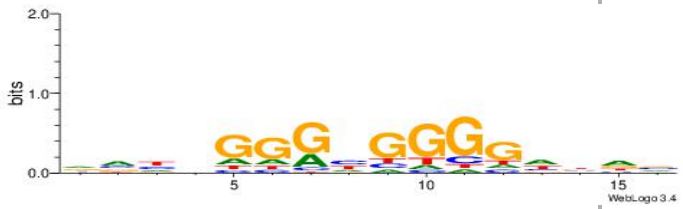
Motif ID:	UP00099
Motif name:	Ascl2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	15
Similarity score:	0.0331968

Alignment:
BHVDCCCCDCCCBDBH
CYCCBCSGVCYCCBC-

Original motif
Consensus sequence: BHVDCCCCDCCCBDBH

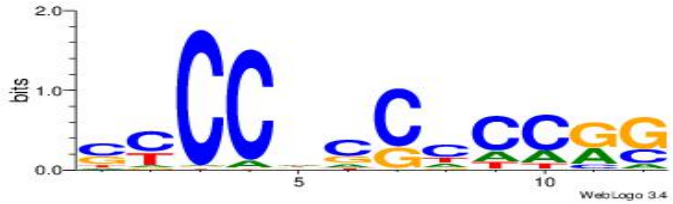


Reverse complement motif
Consensus sequence: HVDVGGGHGGGGDBHB

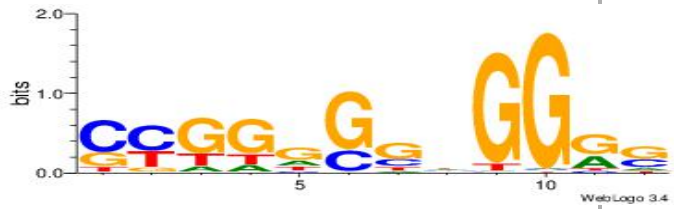


Dataset #: 1 Motif ID: 59 Motif name: C059

Original motif
Consensus sequence: SYCCDCCCCCRG



Reverse complement motif
Consensus sequence: CMGGGGGDGGKS



Best Matches for Motif ID 59 (Highest to Lowest)

Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif

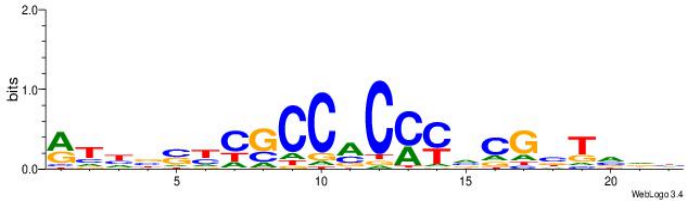
Direction:	Backward
Position number:	5
Number of overlap:	12
Similarity score:	0.0197332

Alignment:

```
RTHBSYCGCCMCMYVCGBTVDH
------SYCCDCCCCCRG----
```

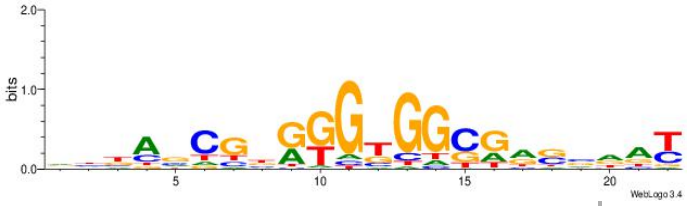
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK

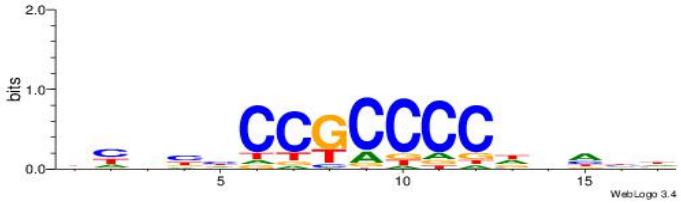


Motif ID:	UP00033
Motif name:	Zfp410_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	12
Similarity score:	0.0224264

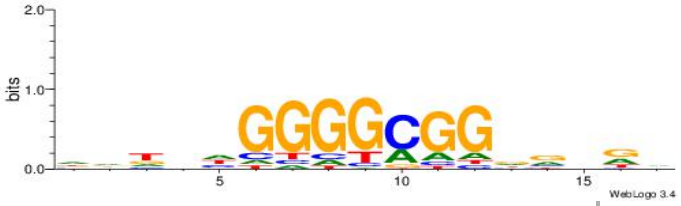
Alignment:

HHHHDGGGGCGGDBHDV
--CMGGGGGDGGKS---

Original motif
Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif
Consensus sequence: HHHHDGGGGCGGDBHDV

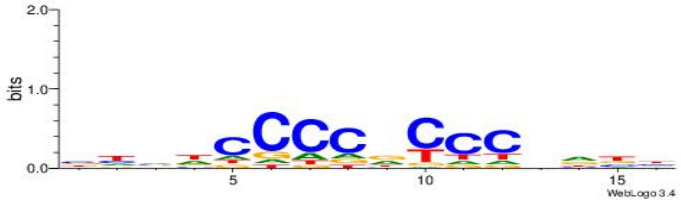


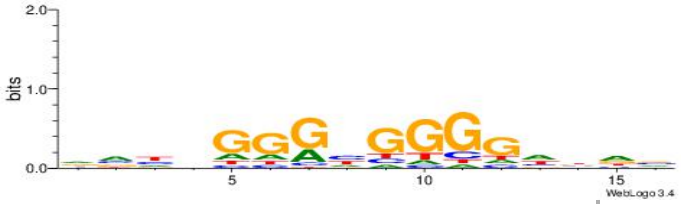
Motif ID:	UP00099
Motif name:	Ascl2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	12
Similarity score:	0.0231684

Alignment:
HVDVGGGHGGGGDBHB
CMGGGGGDGGKS----

Original motif
Consensus sequence: BHVDCCCCDCCCBDBH

Reverse complement motif
Consensus sequence: HVDVGGGHGGGGDBHB





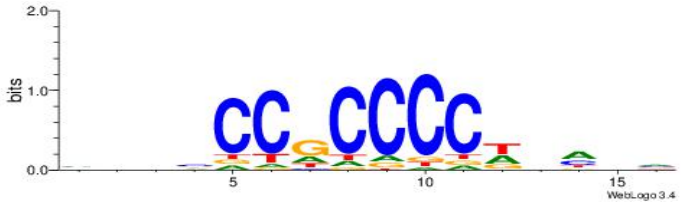
Motif ID:	UP00043
Motif name:	Bcl6b_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	12
Similarity score:	0.023387

Alignment:

```
BHHHWGGGGCGGBBVH
--CMGGGGGDGGKS--
```

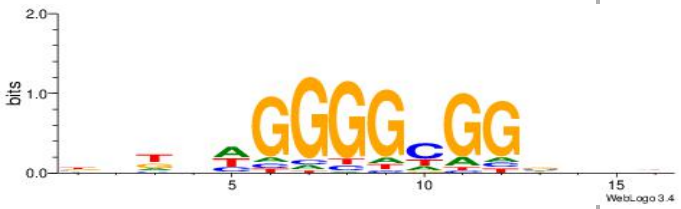
Original motif

Consensus sequence: HBBBCCGCCCCWHHHV



Reverse complement motif

Consensus sequence: BHHHWGGGGCGGBBVH



Motif ID:	UP00540

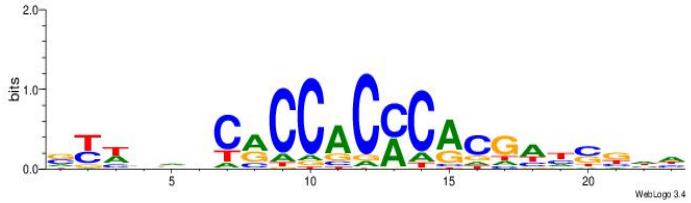
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	12
Similarity score:	0.0246213

Alignment:

```
HHBSHTCGTGRGTGGKGDBVWMV
-----CMGGGGGDGGKS------
```

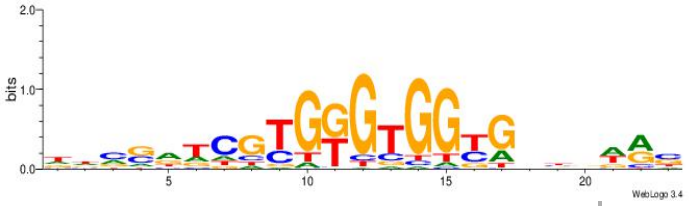
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



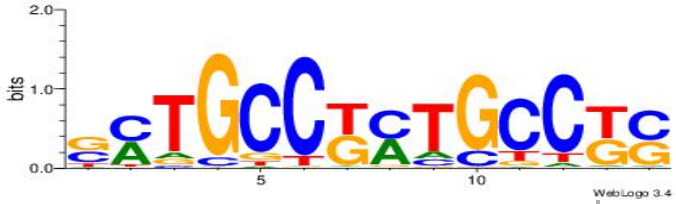
Dataset #: 1 Motif ID: 60 Motif name: C060

Original motif

Consensus sequence: SMGGCAKMGGCAKS

Reverse complement motif

Consensus sequence: SYTGCCYYTGCCYS



Best Matches for Motif ID 60 (Highest to Lowest)

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:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0309254

Alignment:

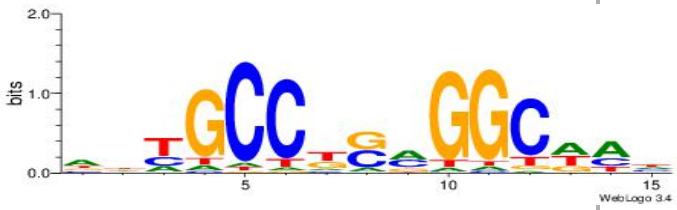
```
HHKGCCYSRGGCWAD
SYTGCCYYTGCCYS-
```

Original motif

Consensus sequence: DTWGCCKSMGGCRHH

Reverse complement motif

Consensus sequence: HHKGCCYSRGGCWAD



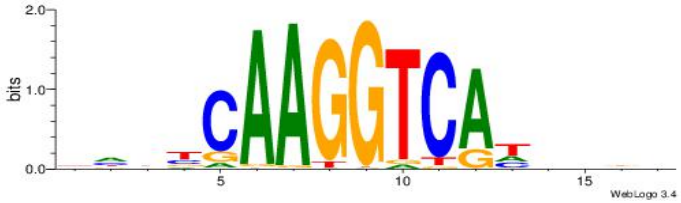
Motif ID:	UP00079
Motif name:	Esrra_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	14
Similarity score:	0.0349665

Alignment:

```
HHBVHTGACCTTGVDHD
---SYTGCCYYTGCCYS
```

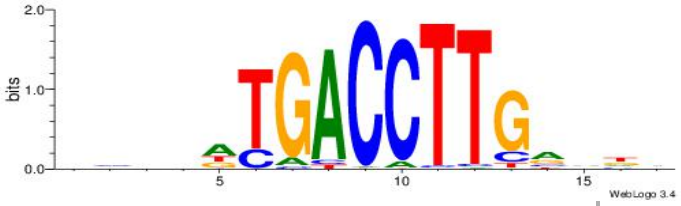
Original motif

Consensus sequence: DHDBCAAGGTCAHVBDH



Reverse complement motif

Consensus sequence: HHBVHTGACCTTGVDHD

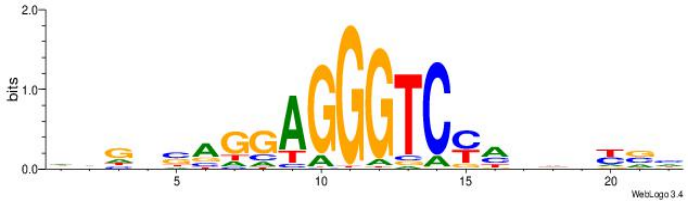


Motif ID:	UP00539
Motif name:	Gli2_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6

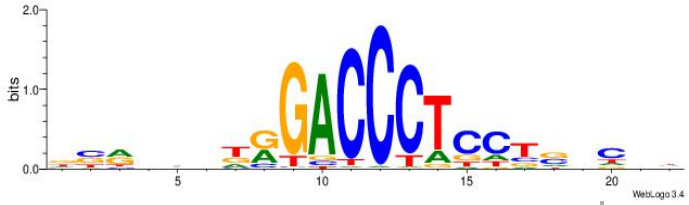
Number of overlap: 14
Similarity score: 0.0406726

Alignment:
DVMHHDHKGACCCTCCTSVCBH
-----SYTGCCYYTGCCYS---

Original motif
Consensus sequence: HVGVSAGGAGGGTCYHHHHYVH



Reverse complement motif
Consensus sequence: DVMHHDHKGACCCTCCTSVCBH



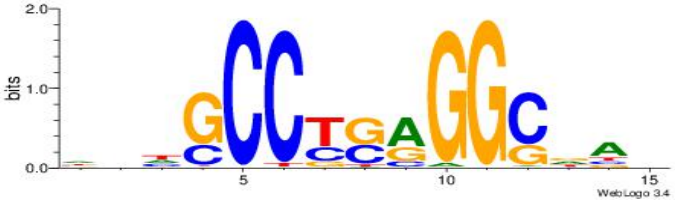
Motif ID: UP00028
Motif name: Tcfap2e_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 1
Number of overlap: 14
Similarity score: 0.0419455

Alignment:
DTHGCCTSAGGCHHH
SYTGCCYYTGCCYS-

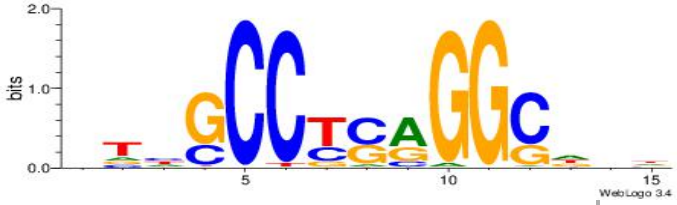
Original motif

Reverse complement motif

Consensus sequence: HHHGCCTSAGGCDAD



Consensus sequence: DTHGCCTSAGGCHHH



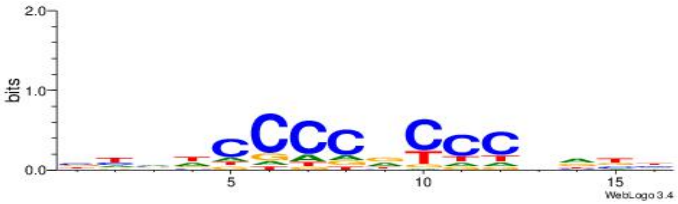
Motif ID:	UP00099
Motif name:	Ascl2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0436588

Alignment:

```
HVDVGGGHGGGGDBHB
SYTGCCYYTGCCYS--
```

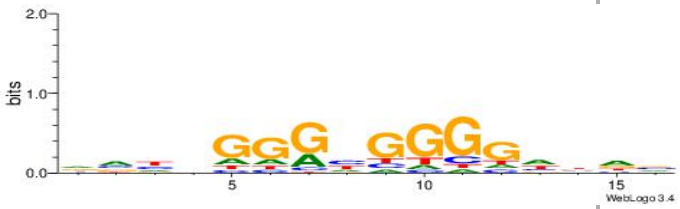
Original motif

Consensus sequence: BHVDCCCCDCCCBDBH



Reverse complement motif

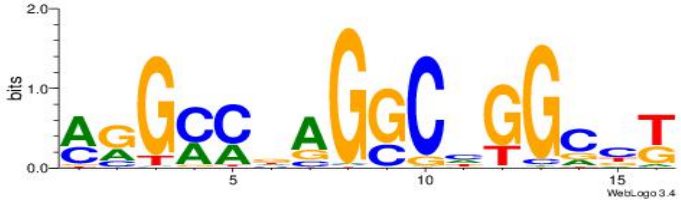
Consensus sequence: HVDVGGGHGGGGDBHB



Dataset #: 1 Motif ID: 61 Motif name: C061

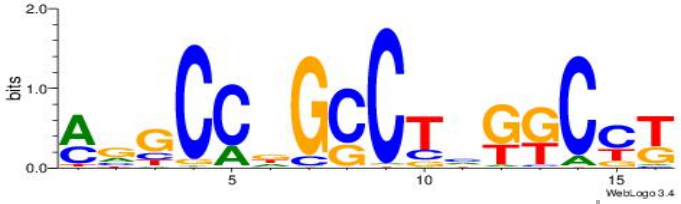
Original motif

Consensus sequence: MRGMMBAGGCHGGCCK



Reverse complement motif

Consensus sequence: RGGCCDGCCTBRRCMY



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:	Forward
Position number:	1
Number of overlap:	16
Similarity score:	0.0354983

Alignment:

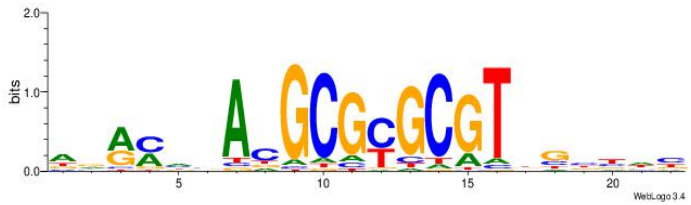
```
DDRMHBACGCGYGCGTDGBBDB
MRGMMBAGGCHGGCCK------
```

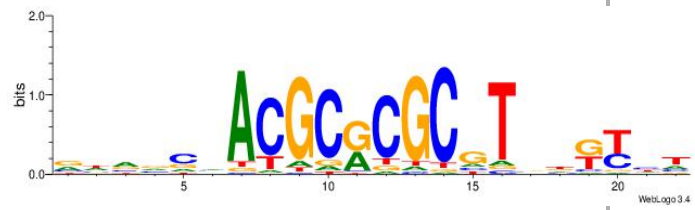
Original motif

Consensus sequence: DDRMHBACGCGYGCGTDGBBDB

Reverse complement motif

Consensus sequence: BDVBCDACGCKCGCGTBHRKHD





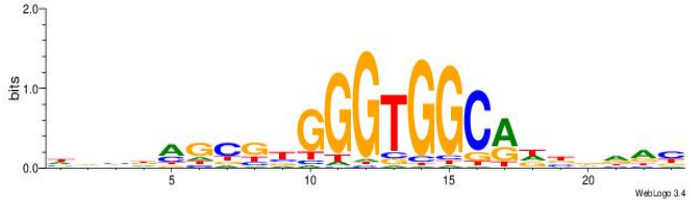
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	16
Similarity score:	0.0371599

Alignment:

```
BDDHVDKGCCACCCVCGCTDBVH
-----RGGCCDGCCTBRRCMY--
```

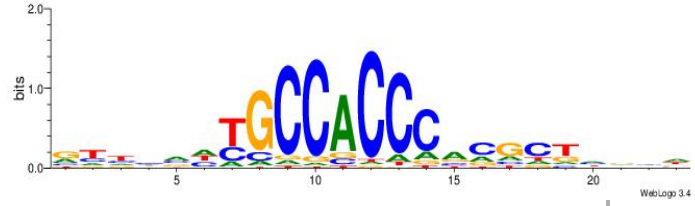
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



Motif ID: UP00538

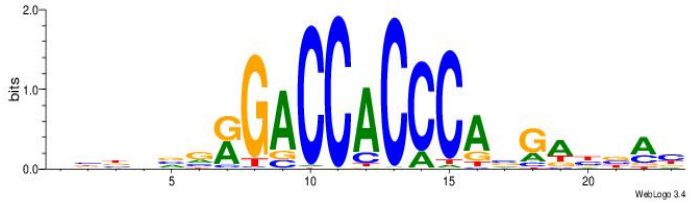
Motif name:	Gli1_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	16
Similarity score:	0.0397188

Alignment:

```
BBBDVVRGACCACCCAVGABBAB
------RGGCCDGCCTBRRCMY-
```

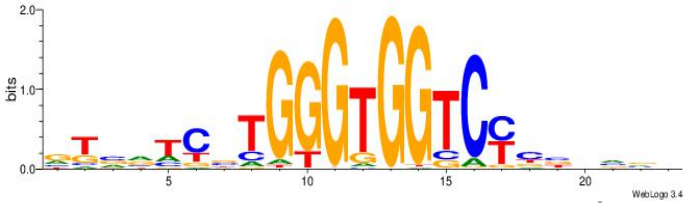
Original motif

Consensus sequence: BBBDVVRGACCACCCAVGABBAB



Reverse complement motif

Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB

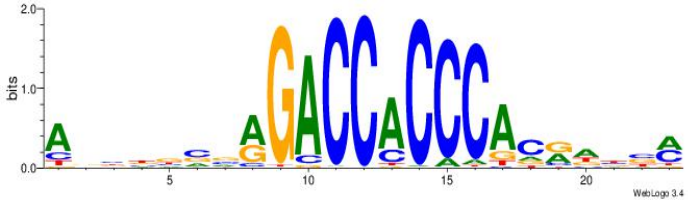


Motif ID:	UP00540
Motif name:	Gli3_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8
Number of overlap:	16

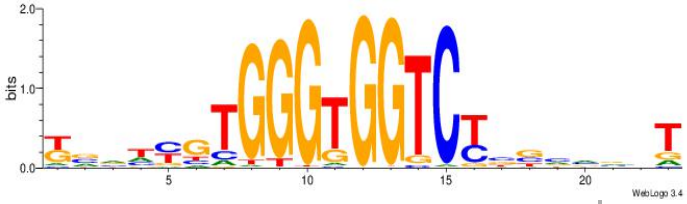
Similarity score: 0.0410046

Alignment:
ABBBBVVRGACCACCCACRDBBM
-------RGGCCDGCCTBRRCMY

Original motif
Consensus sequence: ABBBBVVRGACCACCCACRDBBM



Reverse complement motif
Consensus sequence: YBVDMGTGGGTGGTCKVVBVBBT

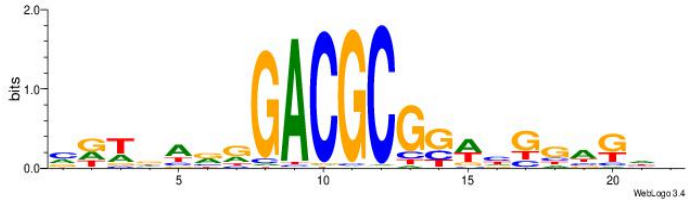


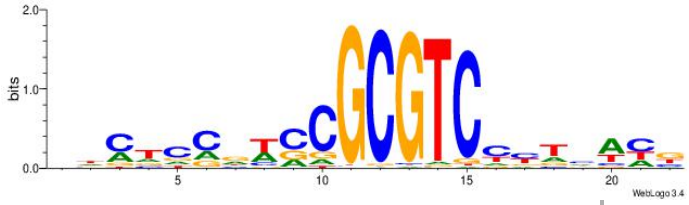
Motif ID: UP00527
Motif name: Foxn4_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 2
Number of overlap: 16
Similarity score: 0.0416624

Alignment:
VDWDARRGACGCGGWHGGAKHV
-----MRGMMBAGGCHGGCCK-

Original motif
Consensus sequence: VDWDARRGACGCGGWHGGAKHV

Reverse complement motif
Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV

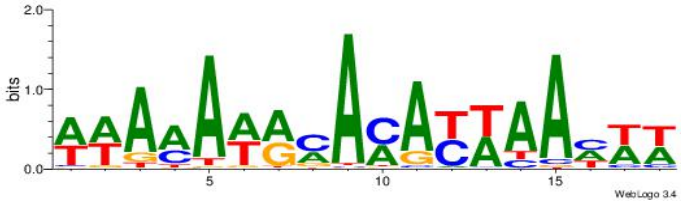




Dataset #: 1 **Motif ID: 62** **Motif name: C062**

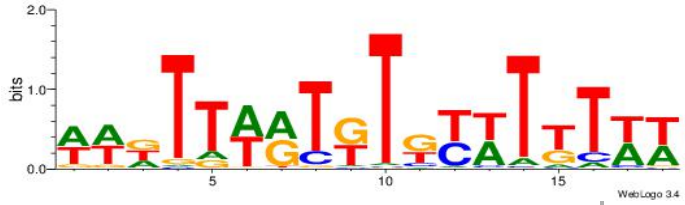
Original motif

Consensus sequence: WWAMAWRMAMAYWAAHWW



Reverse complement motif

Consensus sequence: WWDTTWMTRTRKWTYTWW



Best Matches for Motif ID 62 (Highest to Lowest)

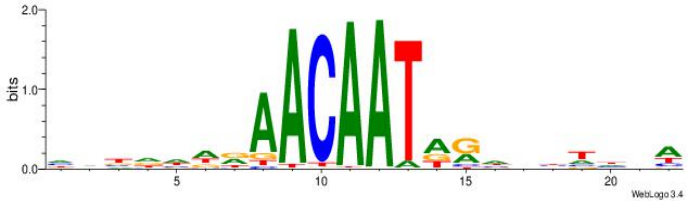
Motif ID:	UP00034
Motif name:	Sox7_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	18
Similarity score:	0.0496099

Alignment:

WBHHHHHMDATTGTTHDHDVHH
-WWDTTWMTRTRKWTYTWW---

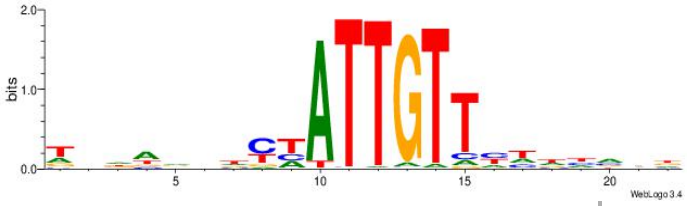
Original motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW



Reverse complement motif

Consensus sequence: WBHHHHHMDATTGTTHDHDVHH



Motif ID:	UP00032
Motif name:	Gata3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	18
Similarity score:	0.0618489

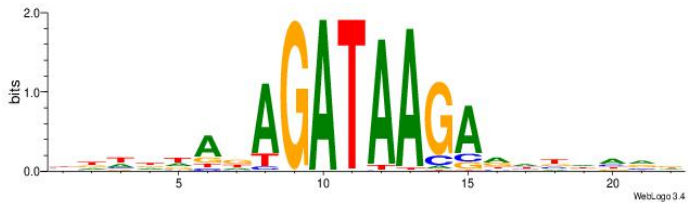
Alignment:
HBHDVHDTCTTATCTHTDDHDV
---WWDTTWMTRTRKWTYTWW-

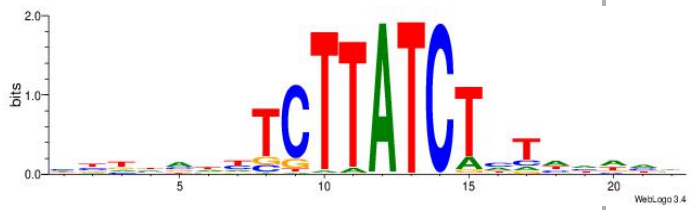
Original motif

Consensus sequence: BDHDDADAGATAAGADHBDHVD

Reverse complement motif

Consensus sequence: HBHDVHDTCTTATCTHTDDHDV





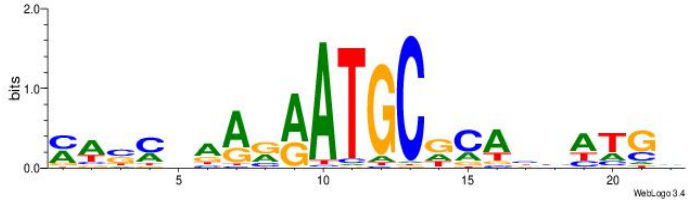
Motif ID:	UP00528
Motif name:	Foxm1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	18
Similarity score:	0.0618699

Alignment:

```
MWSMBAARRATGCDCABHATGD
-WWAMAWRMAMAYWAAHWW---
```

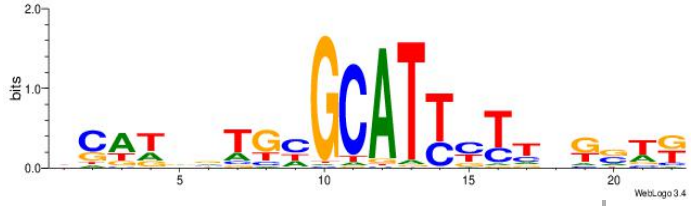
Original motif

Consensus sequence: MWSMBAARRATGCDCABHATGD



Reverse complement motif

Consensus sequence: DCATDBTGHGCATKMTTBRSWR



Motif ID:	UP00034

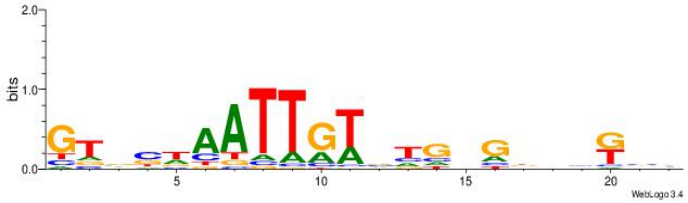
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	18
Similarity score:	0.0626028

Alignment:

```
VVYDDDCHCAVACAATTDBVAC
---WWAMAWRMAMAYWAAHWW-
```

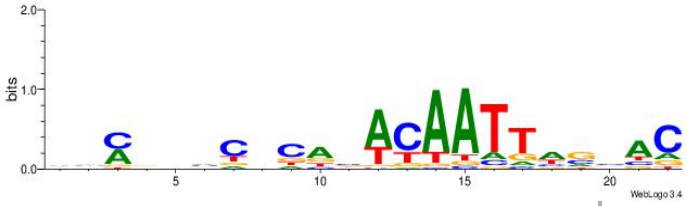
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif

Consensus sequence: VVYDDDCHCAVACAATTDBVAC

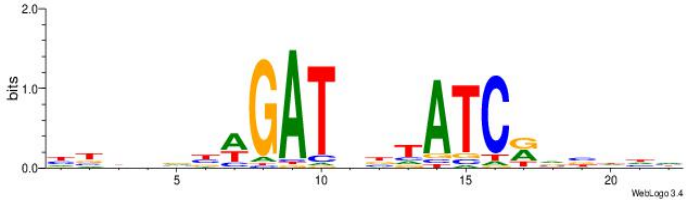


Motif ID:	UP00032
Motif name:	Gata3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	18

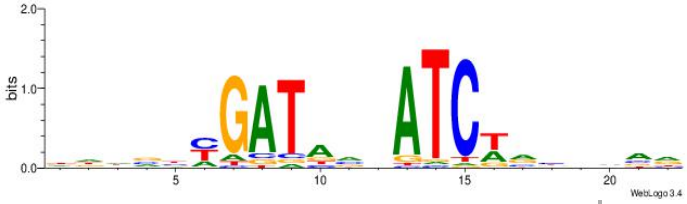
Similarity score: 0.065917

Alignment:
HHHBBMGATAVHATCWVVDHVH
---WWAMAWRMAMAYWAAHWW-

Original motif
Consensus sequence: HBHDVBWGATHBTATCRVBHHH

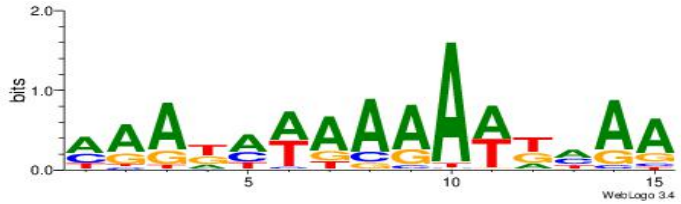


Reverse complement motif
Consensus sequence: HHHBBMGATAVHATCWVVDHVH

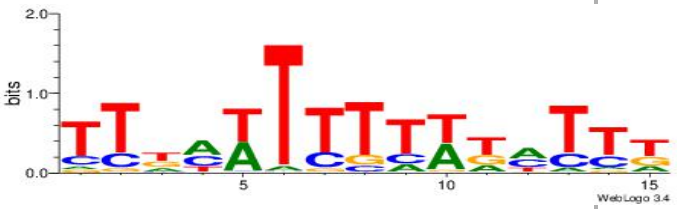


Dataset #: 1 Motif ID: 63 Motif name: C063

Original motif
Consensus sequence: MAAKMWAAAAWKHAA



Reverse complement motif
Consensus sequence: TTHRWTTTTWYRTTY



Best Matches for Motif ID 63 (Highest to Lowest)

Motif ID:	UP00061
Motif name:	Foxl1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement

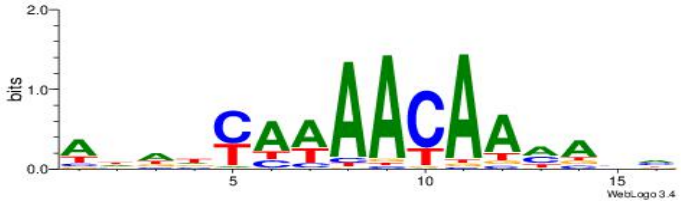
Direction:	Forward
Position number:	1
Number of overlap:	15
Similarity score:	0.0344456

Alignment:

```
HDTYTTGTTWTKDDDT
TTHRWTTTTWYRTTY-
```

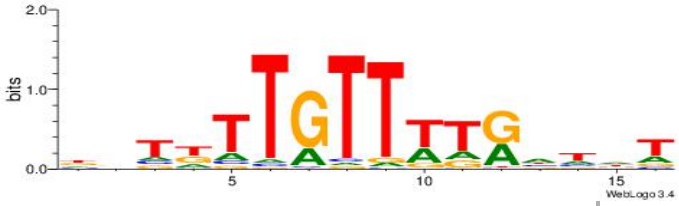
Original motif

Consensus sequence: ADDDYAWAACAAMAHH



Reverse complement motif

Consensus sequence: HDTYTTGTTWTKDDDT



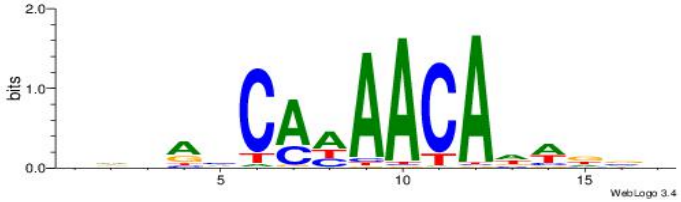
Motif ID:	UP00039
Motif name:	Foxj3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	15
Similarity score:	0.0345147

Alignment:

```
DVHWDTGTTWTGDTBDH
TTHRWTTTTWYRTTY--
```

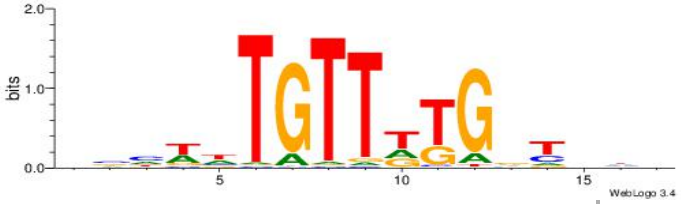
Original motif

Consensus sequence: HDBAHCAWAACADWDVD



Reverse complement motif

Consensus sequence: DVHWDTGTTWTGDTBDH



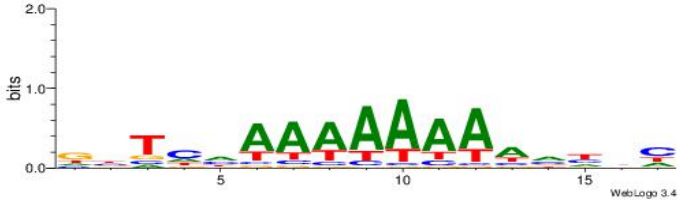
Motif ID:	UP00090
Motif name:	Elf3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	15
Similarity score:	0.0355538

Alignment:

```
DDHBTTTTTTTTHDAVH
--TTHRWTTTTWYRTTY
```

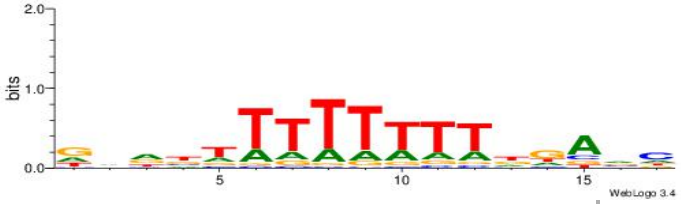
Original motif

Consensus sequence: DBTHHAAAAAAAAVHDH



Reverse complement motif

Consensus sequence: DDHBTTTTTTTTHDAVH



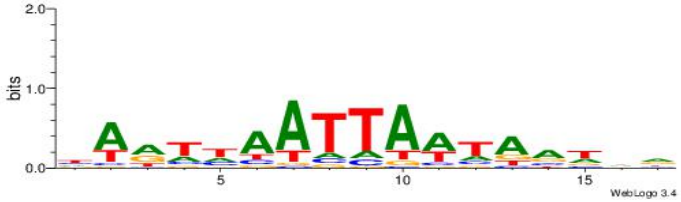
Motif ID:	UP00255
Motif name:	Dbx1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	15
Similarity score:	0.0356888

Alignment:

```
DHDBTAWTAATTHAKTH
--TTHRWTTTTWYRTTY
```

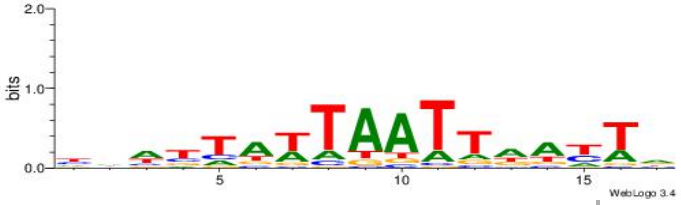
Original motif

Consensus sequence: HARTHAATTAWTAVDHD



Reverse complement motif

Consensus sequence: DHDBTAWTAATTHAKTH

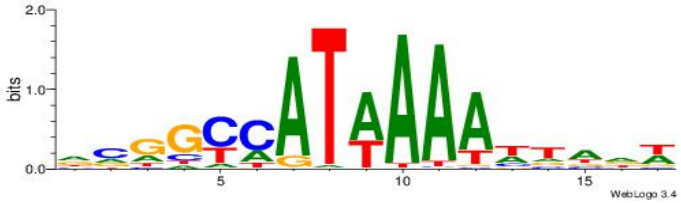


Motif ID:	UP00213
Motif name:	Hoxa9
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1

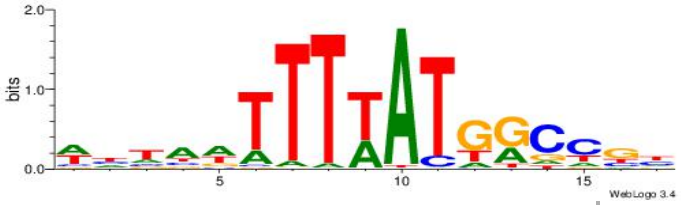
Number of overlap: 15
Similarity score: 0.0367298

Alignment:
WDTAWTTTWATGKCCGD
TTHRWTTTTWYRTTY--

Original motif
Consensus sequence: DCGGYCATWAAAWTADW

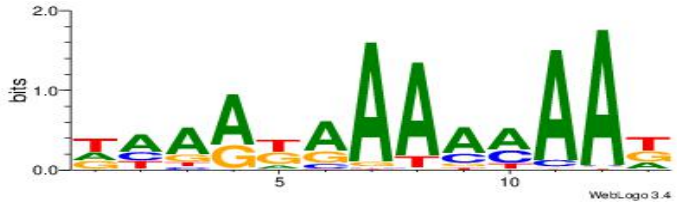


Reverse complement motif
Consensus sequence: WDTAWTTTWATGKCCGD

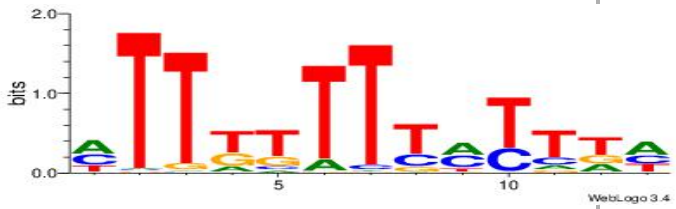


Dataset #: 1 Motif ID: 64 Motif name: C064

Original motif
Consensus sequence: DAAAKAAAAMAAK



Reverse complement motif
Consensus sequence: RTTYTTTTRTTTD



Best Matches for Motif ID 64 (Highest to Lowest)

Motif ID: UP00077
Motif name: Srf_secondary
Species: Mus musculus

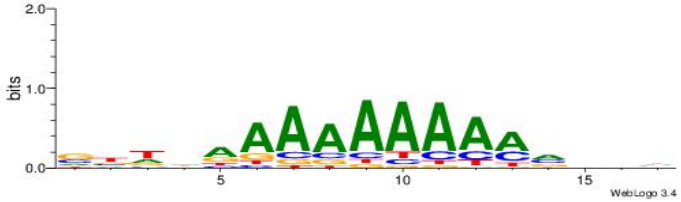
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	13
Similarity score:	0.0175156

Alignment:

```
HHVBYTTTTTTTTDDVV
--RTTYTTTTRTTTD--
```

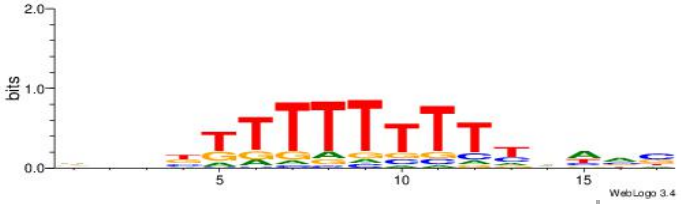
Original motif

Consensus sequence: VBDDAAAAAAAAMVBHH



Reverse complement motif

Consensus sequence: HHVBYTTTTTTTTDDVV

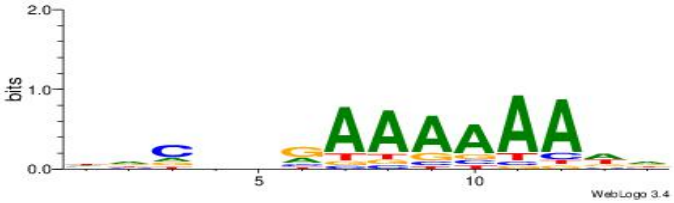


Motif ID:	UP00028
Motif name:	Tcfap2e_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	13
Similarity score:	0.0210094

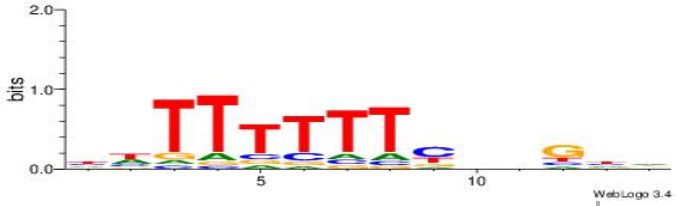
Alignment:

HDCDBRAAAAAADD
DAAAKAAAAMAAK-

Original motif
Consensus sequence: HDCDBRAAAAAADD



Reverse complement motif
Consensus sequence: DDTTTTTTMBDGDH

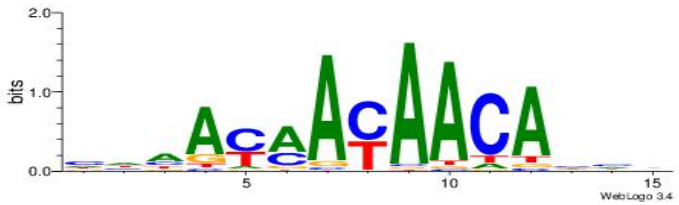


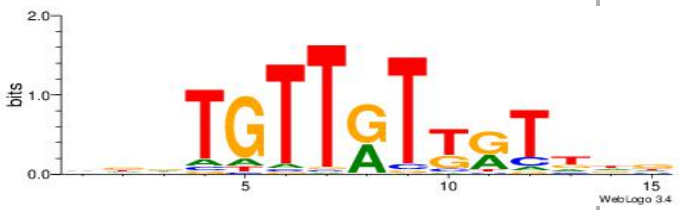
Motif ID:	UP00025
Motif name:	Foxk1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	13
Similarity score:	0.030589

Alignment:
HDDTGTTKTTKTHHD
--RTTYTTTTRTTTD

Original motif
Consensus sequence: HHHAYAAYAACAHHH

Reverse complement motif
Consensus sequence: HDDTGTTKTTKTHHD





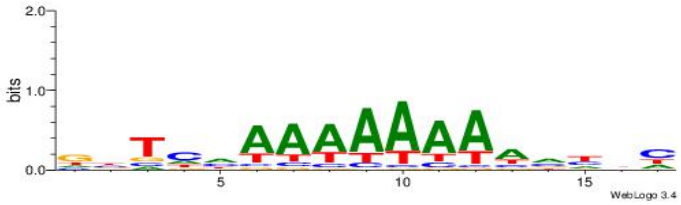
Motif ID:	UP00090
Motif name:	Elf3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	13
Similarity score:	0.0322312

Alignment:

```
DDHBTTTTTTTTHDAVH
-RTTYTTTTRTTTD---
```

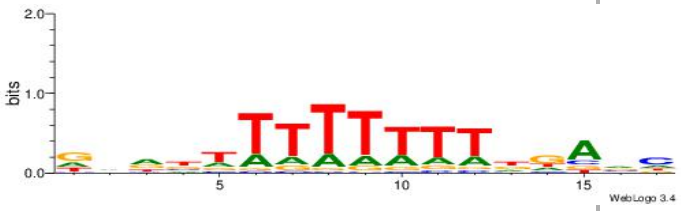
Original motif

Consensus sequence: DBTHHAAAAAAAAVHDH



Reverse complement motif

Consensus sequence: DDHBTTTTTTTTHDAVH



Motif ID:	UP00180

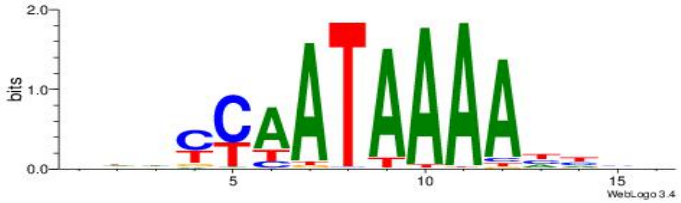
Motif name:	Hoxd13
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	13
Similarity score:	0.0326524

Alignment:

```
HDHHTTTTATTKKHDD
---RTTYTTTTRTTTD
```

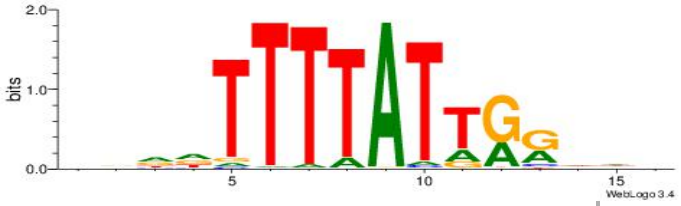
Original motif

Consensus sequence: HDHYYAATAAAAHHHH



Reverse complement motif

Consensus sequence: HDHHTTTTATTKKHDD



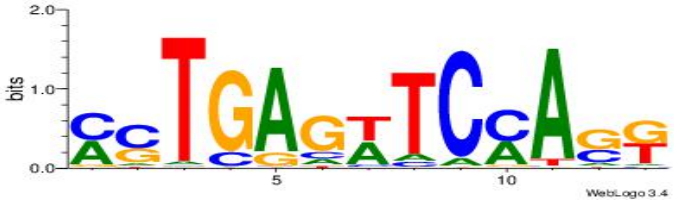
Dataset #: 1 **Motif ID: 65** **Motif name: C065**

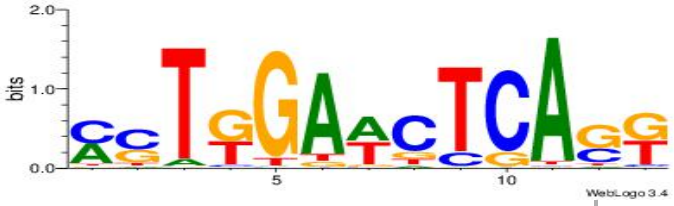
Original motif

Consensus sequence: MSTGAGWTCMASK

Reverse complement motif

Consensus sequence: YSTRGAWCTCASR





Best Matches for Motif ID 65 (Highest to Lowest)

Motif ID:	UP00080
Motif name:	Gata5_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:	13
Similarity score:	0.0144176

Alignment:

```
VVHHWGATATCTMHBBV
--MSTGAGWTCMASK--
```

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:	Forward
Position number:	2
Number of overlap:	13
Similarity score:	0.0160219

Alignment:

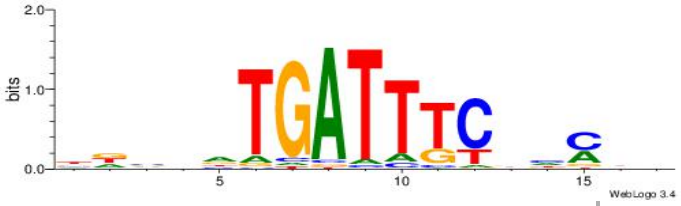
```
DDKDHGAAATCAHHBHV
-YSTRGAWCTCASR---
```

Original motif

Consensus sequence: DDKDHGAAATCAHHBHV

Reverse complement motif

Consensus sequence: BDBDHTGATTTCDHYDD

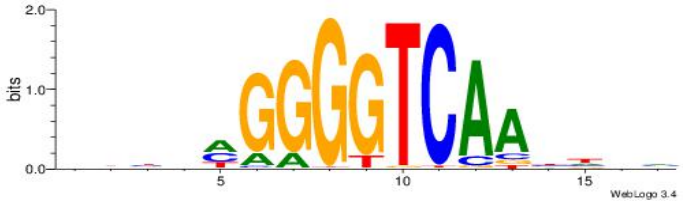


Motif ID:	UP00066
Motif name:	Hnf4a_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3

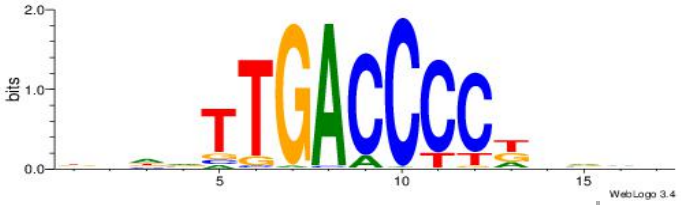
Number of overlap: 13
Similarity score: 0.0188193

Alignment:
BDBVMGGGGTCAABHDV
--MSTGAGWTCMASK--

Original motif
Consensus sequence: BDBVMGGGGTCAABHDV



Reverse complement motif
Consensus sequence: BHHVTTGACCCCYVVDB



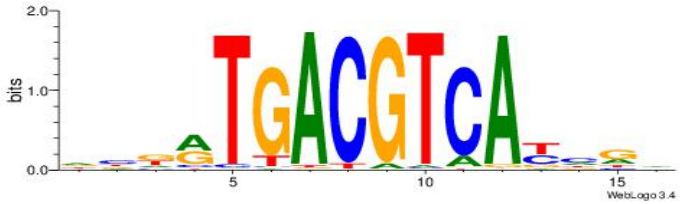
Motif ID: UP00020
Motif name: Atf1_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 13
Similarity score: 0.0224584

Alignment:
DMDMTGACGTCAKHBD
--MSTGAGWTCMASK-

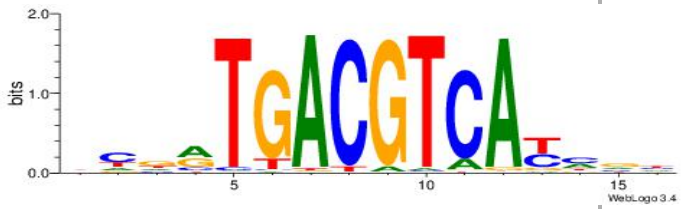
Original motif

Reverse complement motif

Consensus sequence: DBDRTGACGTCAYHRD



Consensus sequence: DMDMTGACGTCAKHBD



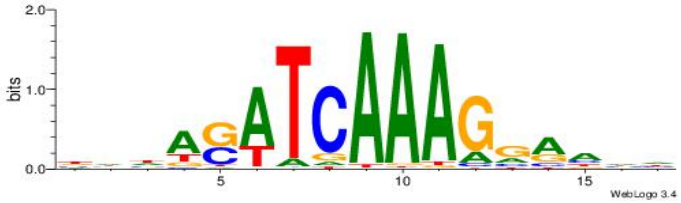
Motif ID:	UP00054
Motif name:	Tcf7_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	13
Similarity score:	0.0232284

Alignment:

```
BHHASATCAAAGGAHHH
YSTRGAWCTCASR----
```

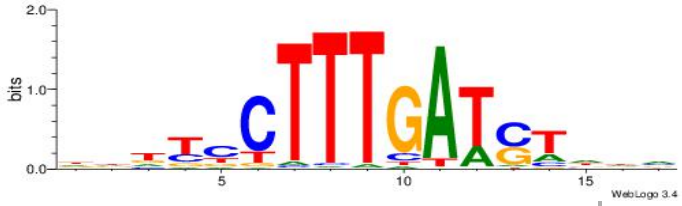
Original motif

Consensus sequence: BHHASATCAAAGGAHHH



Reverse complement motif

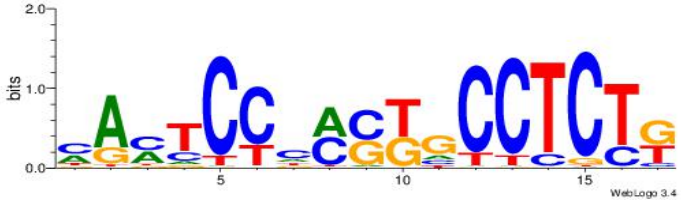
Consensus sequence: HHHTCCTTTGATSTHHV



Dataset #: 1 **Motif ID: 66** **Motif name: C066**

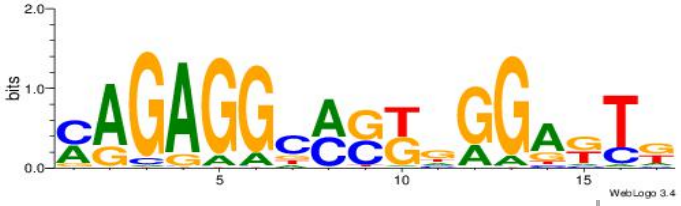
Original motif

Consensus sequence: MAMTCCCMSKGCCTCTK



Reverse complement motif

Consensus sequence: YAGAGGCRSYGGGARTR



Best Matches for Motif ID 66 (Highest to Lowest)

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:	6
Number of overlap:	17
Similarity score:	0.03808

Alignment:

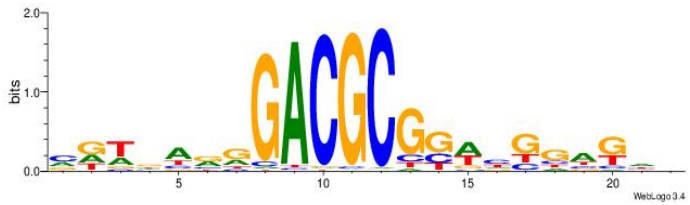
```
VDWDARRGACGCGGWHGGAKHV
-----YAGAGGCRSYGGGARTR
```

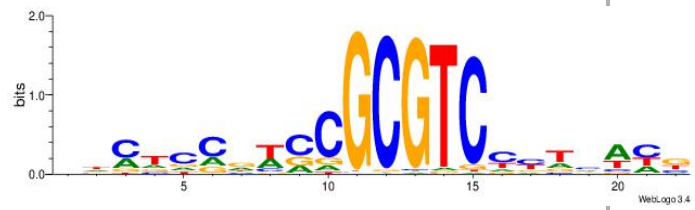
Original motif

Consensus sequence: VDWDARRGACGCGGWHGGAKHV

Reverse complement motif

Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV





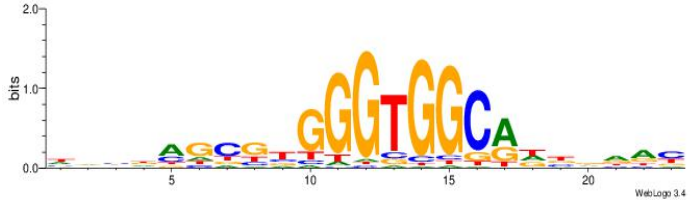
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	17
Similarity score:	0.0499224

Alignment:

```
HVBDAGCGBGGGTGGCRDBDDDB
---YAGAGGCRSYGGGARTR---
```

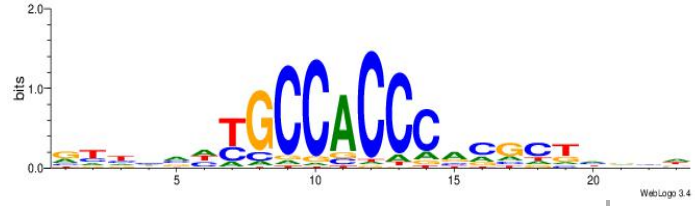
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



Motif ID:	UP00033

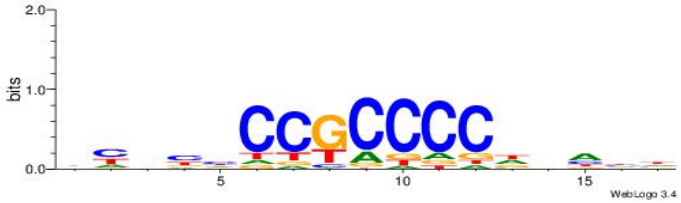
Motif name:	Zfp410_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	17
Similarity score:	0.0510562

Alignment:

```
HHHHDGGGGCGGDBHDV
YAGAGGCRSYGGGARTR
```

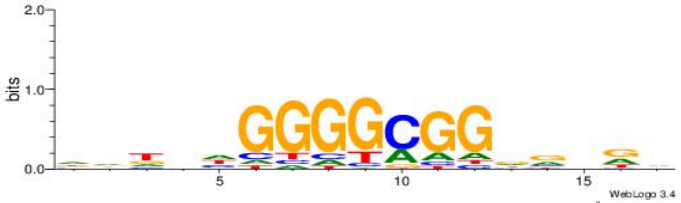
Original motif

Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif

Consensus sequence: HHHHDGGGGCGGDBHDV

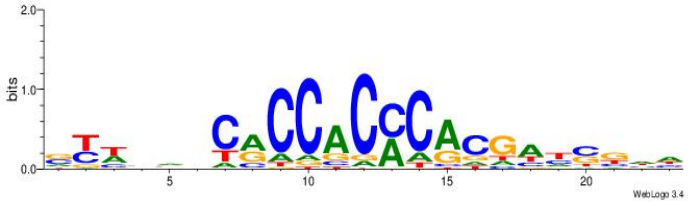


Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	17

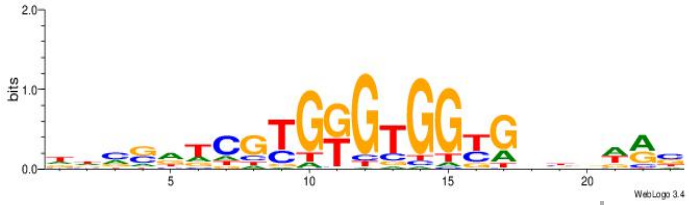
Similarity score: 0.0517099

Alignment:
HHBSHTCGTGRGTGGKGDBVWMV
---YAGAGGCRSYGGGARTR---

Original motif
Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif
Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV

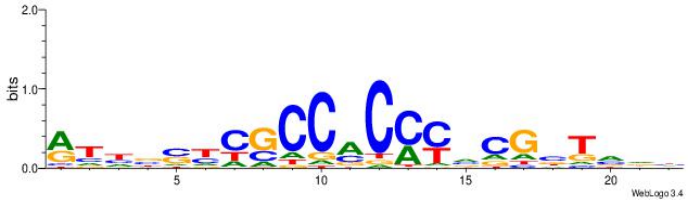


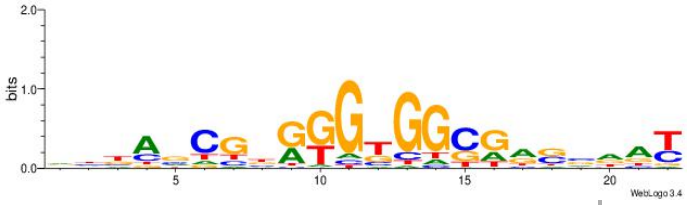
Motif ID: UP00539
Motif name: Gli2_v016060_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 17
Similarity score: 0.0522208

Alignment:
HDBABCGBKRGYGGCGMSBHAK
--YAGAGGCRSYGGGARTR---

Original motif
Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH

Reverse complement motif
Consensus sequence: HDBABCGBKRGYGGCGMSBHAK

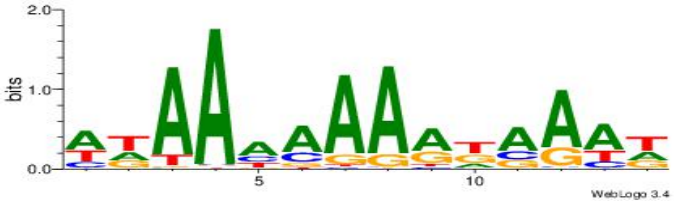




Dataset #: 1 **Motif ID: 67** **Motif name: C067**

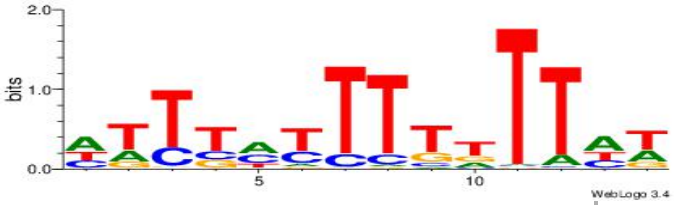
Original motif

Consensus sequence: WDAAAAAARKAAAD



Reverse complement motif

Consensus sequence: DTTTRKTTTTTTDW



Best Matches for Motif ID 67 (Highest to Lowest)

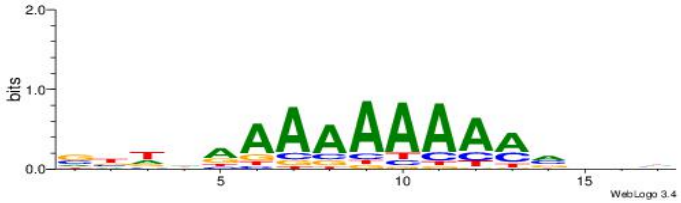
Motif ID:	UP00077
Motif name:	Srf_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	14
Similarity score:	0.0232781

Alignment:

VBDDAAAAAAAAMVBHH
---WDAAAAAARKAAAD

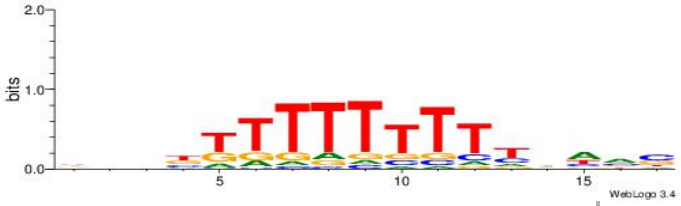
Original motif

Consensus sequence: VBDDAAAAAAAAMVBHH



Reverse complement motif

Consensus sequence: HHVBYTTTTTTTTDDVV



Motif ID:	UP00037
Motif name:	Zfp105_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0263721

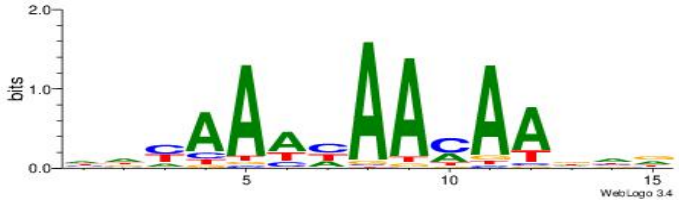
Alignment:
HDYAAAHAAMAADHD
-WDAAAAAARKAAAD

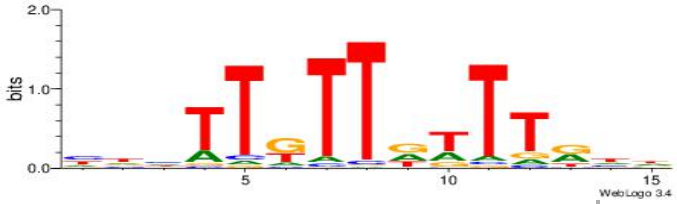
Original motif

Consensus sequence: HDYAAAHAAMAADHD

Reverse complement motif

Consensus sequence: HHHTTRTTDTTTKDH





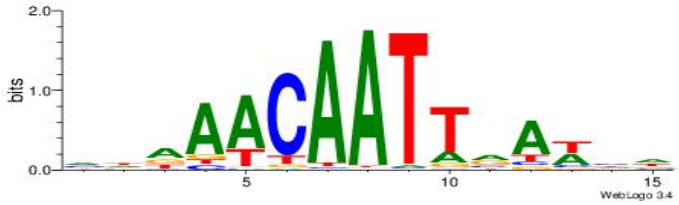
Motif ID:	UP00014
Motif name:	Sox17_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	14
Similarity score:	0.0301541

Alignment:

```
DDWTBAATTGTTDDB
-DTTTRKTTTTTTDW
```

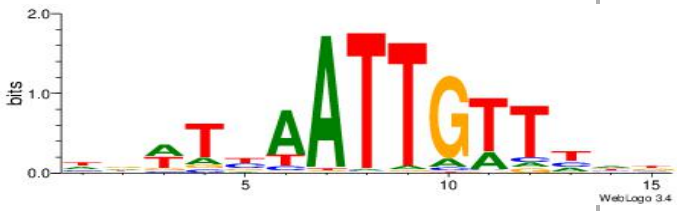
Original motif

Consensus sequence: VDDAACAATTVAWHD



Reverse complement motif

Consensus sequence: DDWTBAATTGTTDDB



Motif ID:	UP00062

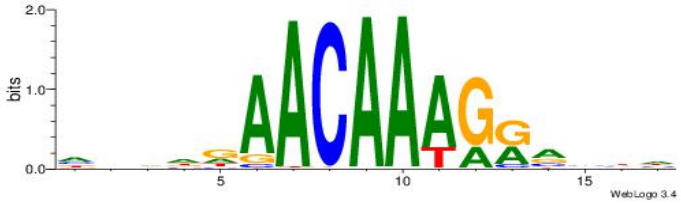
Motif name:	Sox4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	14
Similarity score:	0.0307495

Alignment:

```
HBDDDAACAAAGRVBHH
---WDAAAAAARKAAAD
```

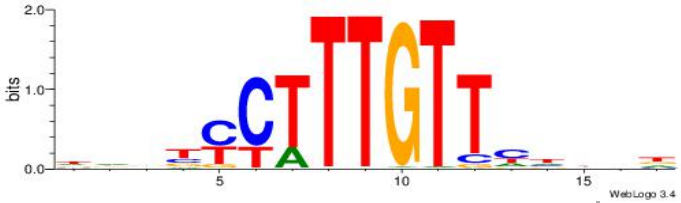
Original motif

Consensus sequence: HBDDDAACAAAGRVBHH



Reverse complement motif

Consensus sequence: HHBBMCTTTGTTHDDBH



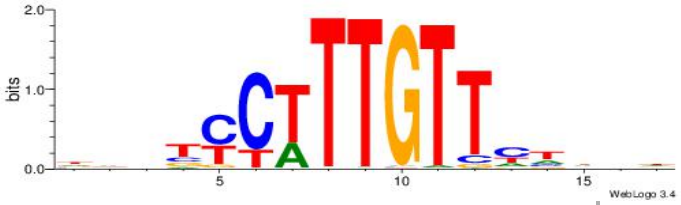
Motif ID:	UP00030
Motif name:	Sox11_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	14

Similarity score: 0.0312958

Alignment:
HBDDRAACAAAGRABHH
---WDAAAAAARKAAAD

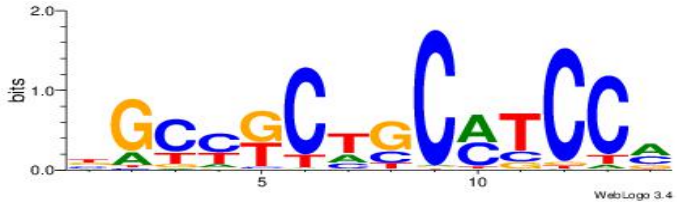
Original motif
Consensus sequence: HBDDRAACAAAGRABHH

Reverse complement motif
Consensus sequence: HHBTMCTTTGTTMDDVH

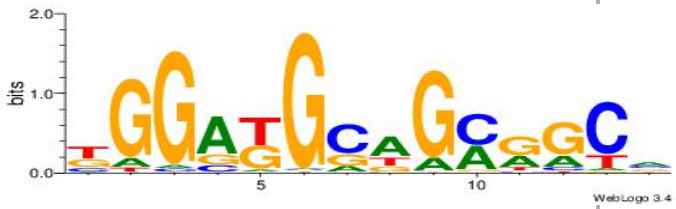


Dataset #: 1 Motif ID: 68 Motif name: C068

Original motif
Consensus sequence: BGCYKCTGCMTCCM



Reverse complement motif
Consensus sequence: YGGAYGCAGYKGCV



Best Matches for Motif ID 68 (Highest to Lowest)

Motif ID:	UP00527
Motif name:	Foxn4_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif

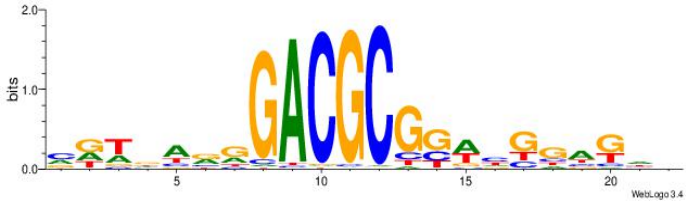
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	14
Similarity score:	0.0242069

Alignment:

```
VHYTCCDWCCGCGTCMMTHWHV
---BGCYKCTGCMTCCM-----
```

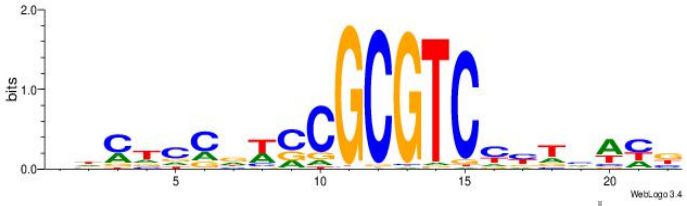
Original motif

Consensus sequence: VDWDARRGACGCGGWHGGAKHV



Reverse complement motif

Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV



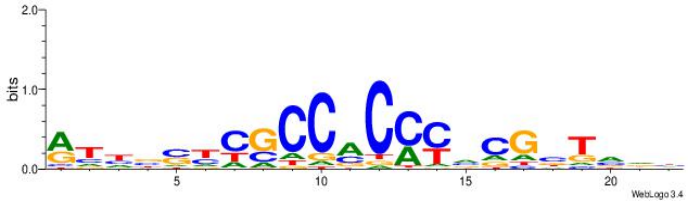
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	14
Similarity score:	0.02581

Alignment:

RTHBSYCGCCMCMYVCGBTVDH
---BGCYKCTGCMTCCM-----

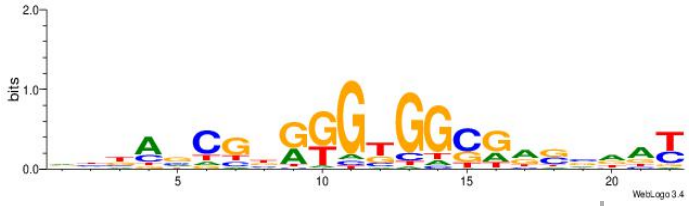
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



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:	2
Number of overlap:	14
Similarity score:	0.0294733

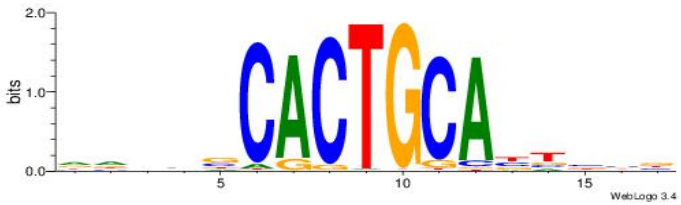
Alignment:
BBBAVTGCAGTGBBVDD
-YGGAYGCAGYKGCV--

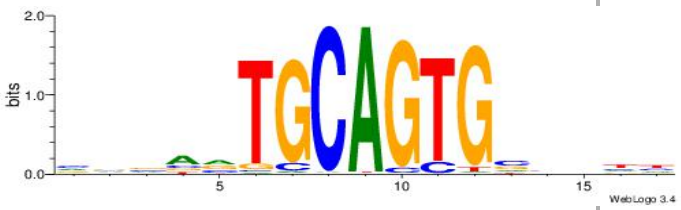
Original motif

Consensus sequence: DDBBBCACTGCABTBBB

Reverse complement motif

Consensus sequence: BBBAVTGCAGTGBBVDD





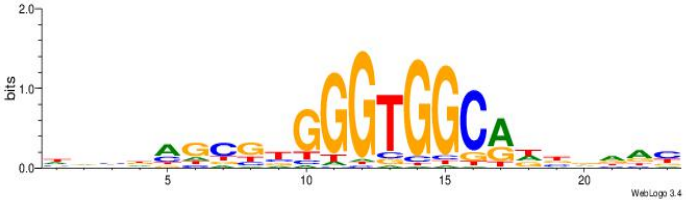
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	10
Number of overlap:	14
Similarity score:	0.0297174

Alignment:

```
BDDHVDKGCCACCCVCGCTDBVH
BGCYKCTGCMTCCM---------
```

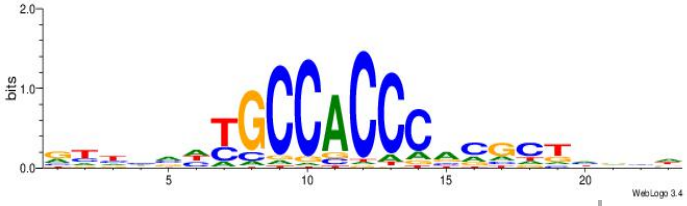
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



Motif ID:	UP00033

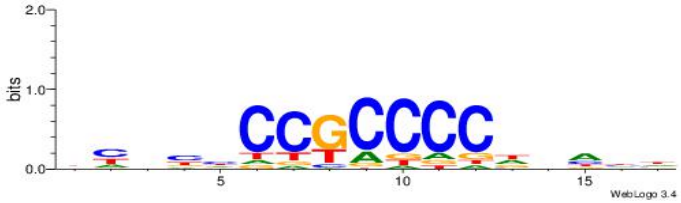
Motif name:	Zfp410_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0300511

Alignment:

```
BHHBHCCGCCCCDHHHH
BGCYKCTGCMTCCM---
```

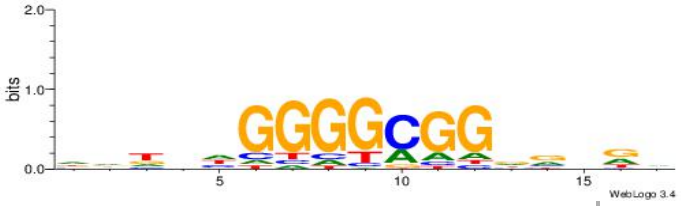
Original motif

Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif

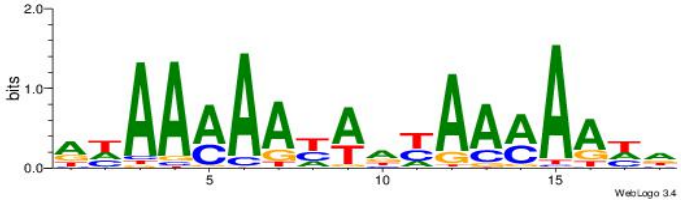
Consensus sequence: HHHHDGGGGCGGDBHDV



Dataset #: 1 Motif ID: 69 Motif name: C069

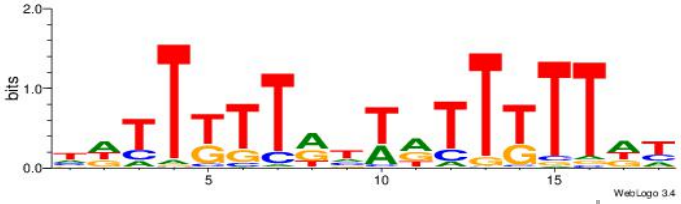
Original motif

Consensus sequence: AHAAMAAYWDYAAMAAHD



Reverse complement motif

Consensus sequence: DHTTYTTMDWMTTYTTHT



Best Matches for Motif ID 69 (Highest to Lowest)

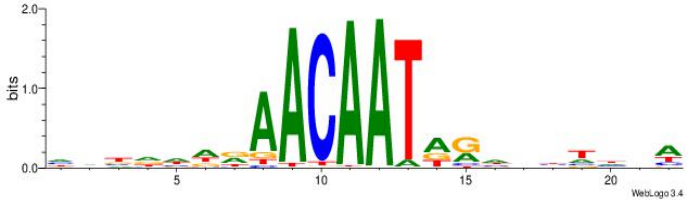
Motif ID:	UP00034
Motif name:	Sox7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	18
Similarity score:	0.0547241

Alignment:

```
HHBDHDDAACAATDRHHHHHBW
--AHAAMAAYWDYAAMAAHD--
```

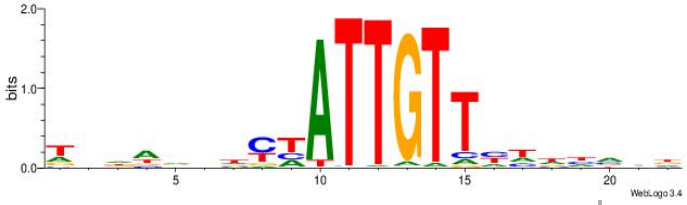
Original motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW



Reverse complement motif

Consensus sequence: WBHHHHHMDATTGTTHDHDVHH



Motif ID:	UP00032
Motif name:	Gata3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement

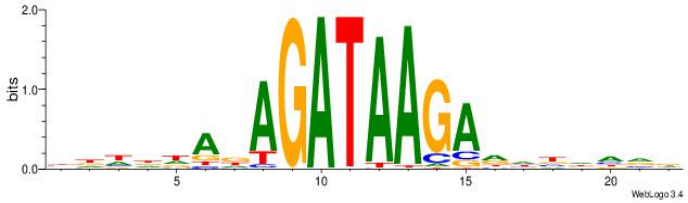
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	18
Similarity score:	0.0556229

Alignment:

```
HBHDVHDTCTTATCTHTDDHDV
-DHTTYTTMDWMTTYTTHT---
```

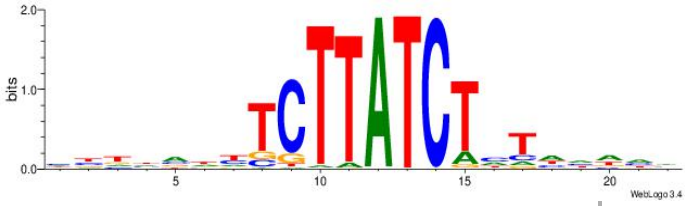
Original motif

Consensus sequence: BDHDDADAGATAAGADHBDHVD



Reverse complement motif

Consensus sequence: HBHDVHDTCTTATCTHTDDHDV



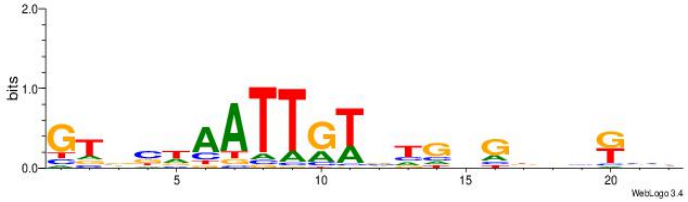
Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	18
Similarity score:	0.0564427

Alignment:

```
GTVBDAATTGTVTGHGDDHKVB
AHAAMAAYWDYAAMAAHD----
```

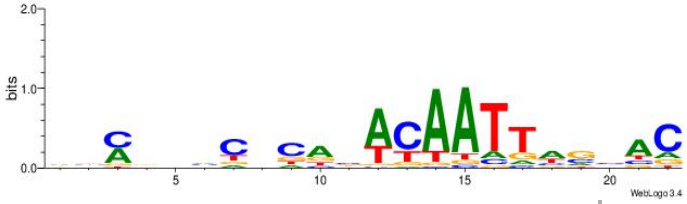
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif

Consensus sequence: VVYDDDCHCAVACAATTDBVAC



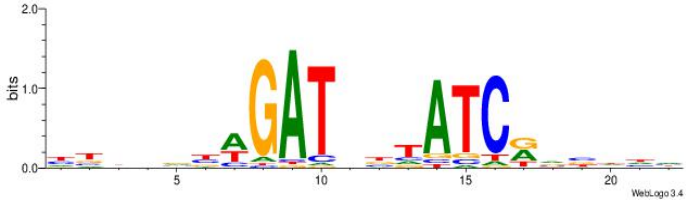
Motif ID:	UP00032
Motif name:	Gata3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	18
Similarity score:	0.058939

Alignment:

```
HHHBBMGATAVHATCWVVDHVH
-AHAAMAAYWDYAAMAAHD---
```

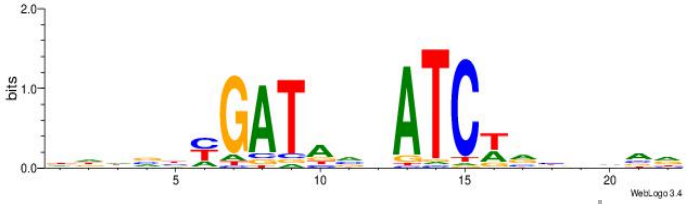
Original motif

Consensus sequence: HBHDVBWGATHBTATCRVBHHH



Reverse complement motif

Consensus sequence: HHHBBMGATAVHATCWVVDHVH



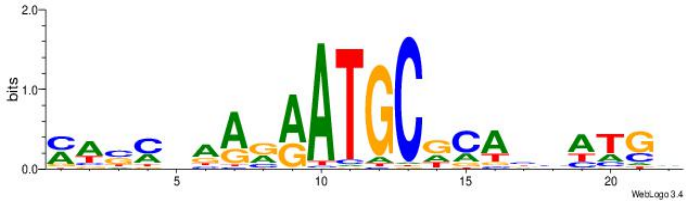
Motif ID:	UP00528
Motif name:	Foxm1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	18
Similarity score:	0.064465

Alignment:

```
DCATDBTGHGCATKMTTBRSWR
-DHTTYTTMDWMTTYTTHT---
```

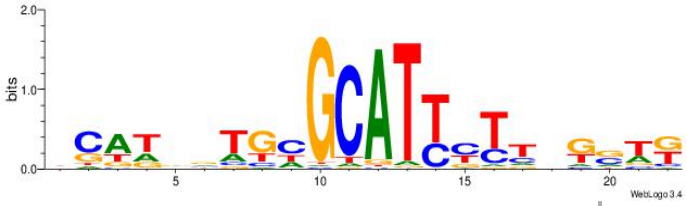
Original motif

Consensus sequence: MWSMBAARRATGCDCABHATGD



Reverse complement motif

Consensus sequence: DCATDBTGHGCATKMTTBRSWR



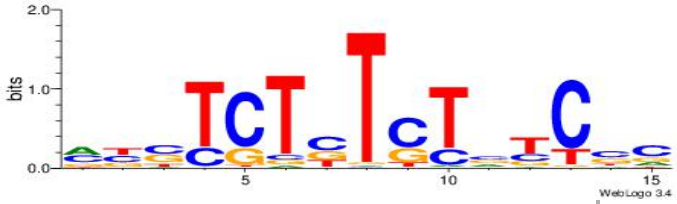
Dataset #: 1 **Motif ID: 70** **Motif name: C070**

Original motif

Consensus sequence: GVGABAGAVAGASVK

Reverse complement motif

Consensus sequence: RBSTCTVTCTBTCVC



Best Matches for Motif ID 70 (Highest to Lowest)

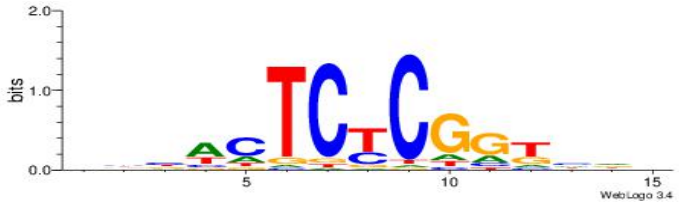
Motif ID:	>UP00011
Motif name:	Irf6_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	15
Similarity score:	0.0371635

Alignment:

```
VBBACTCYCGGKHDV
RBSTCTVTCTBTCVC
```

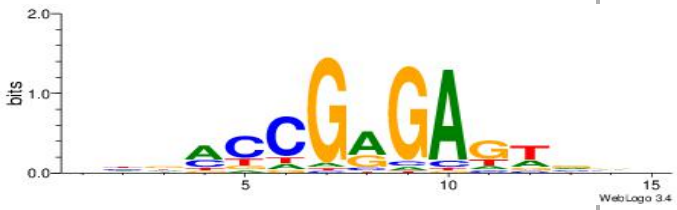
Original motif

Consensus sequence: VBBACTCYCGGKHDV



Reverse complement motif

Consensus sequence: VDDRCCGMGAGTBBB



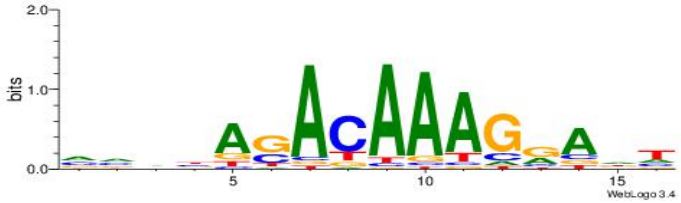
Motif ID:	UP00101
Motif name:	Sox12_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	15
Similarity score:	0.0394179

Alignment:

```
VVDBASACAAAGRADH
-GVGABAGAVAGASVK
```

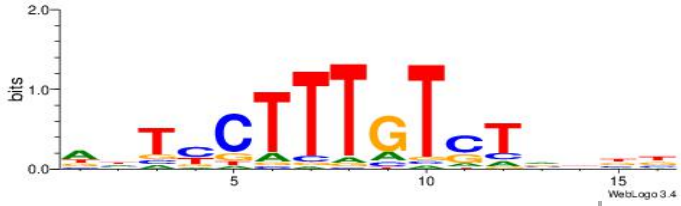
Original motif

Consensus sequence: VVDBASACAAAGRADH



Reverse complement motif

Consensus sequence: HDTMCTTTGTSTVDBB

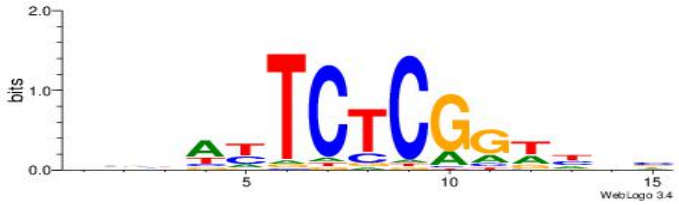


Motif ID:	UP00018
Motif name:	Irf4_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	15

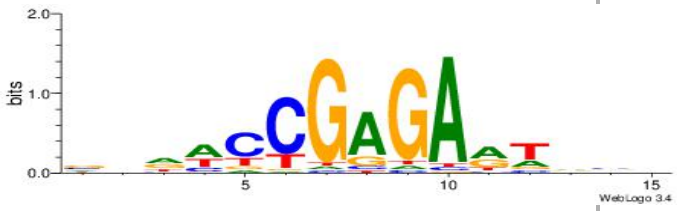
Similarity score: 0.0452113

Alignment:
BHHWCCGAGAMTVVB
RBSTCTVTCTBTCVC

Original motif
Consensus sequence: VVBAYTCTCGGWHDB



Reverse complement motif
Consensus sequence: BHHWCCGAGAMTVVB

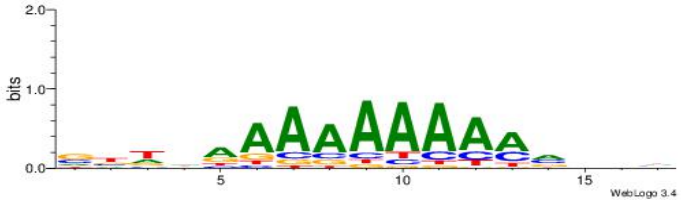


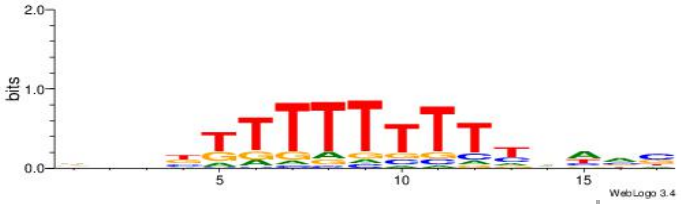
Motif ID: UP00077
Motif name: Srf_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 15
Similarity score: 0.0480451

Alignment:
VBDDAAAAAAAAAMVBHH
GVGABAGAVAGASVK--

Original motif
Consensus sequence: VBDDAAAAAAAAAMVBHH

Reverse complement motif
Consensus sequence: HHVBYTTTTTTTTDDVV





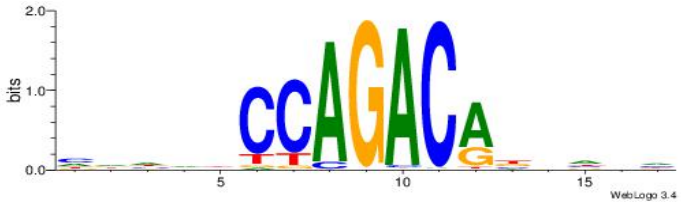
Motif ID:	UP00000
Motif name:	Smad3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	15
Similarity score:	0.0486114

Alignment:

```
HVHBVTGTCTGGDDHDD
--RBSTCTVTCTBTCVC
```

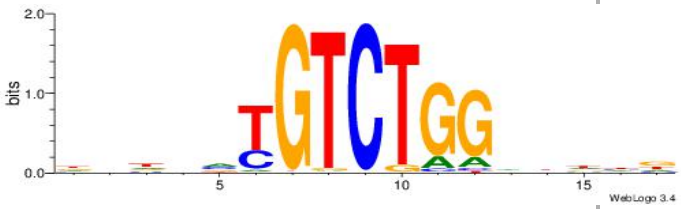
Original motif

Consensus sequence: HDHDDCCAGACABBHVH



Reverse complement motif

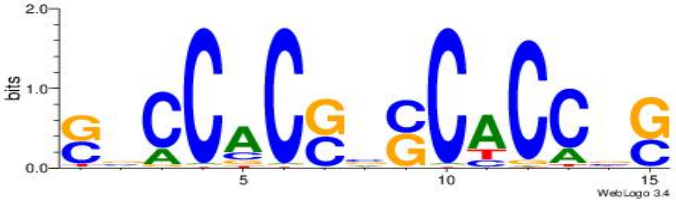
Consensus sequence: HVHBVTGTCTGGDDHDD



Dataset #: 1 Motif ID: 71 Motif name: C071

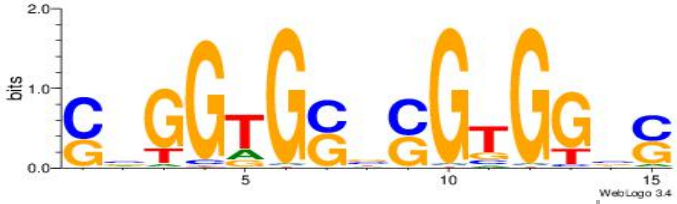
Original motif

Consensus sequence: SVCCACSVSCACCBS



Reverse complement motif

Consensus sequence: SBGGTGSVSGTGGVS



Best Matches for Motif ID 71 (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:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	15
Similarity score:	0.0205519

Alignment:

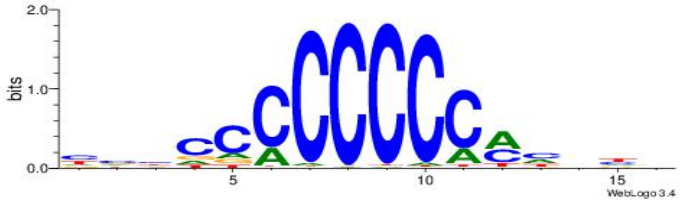
```
HVBCCCCCCCCMHHHB
-SVCCACSVSCACCBS
```

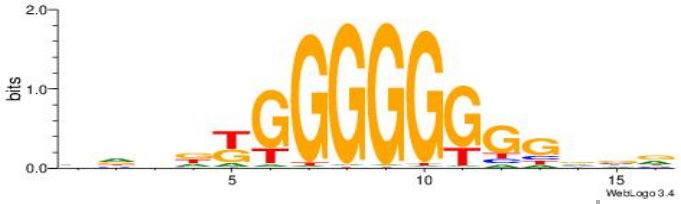
Original motif

Consensus sequence: HVBCCCCCCCCMHHHB

Reverse complement motif

Consensus sequence: BHHDYGGGGGGGGBVD





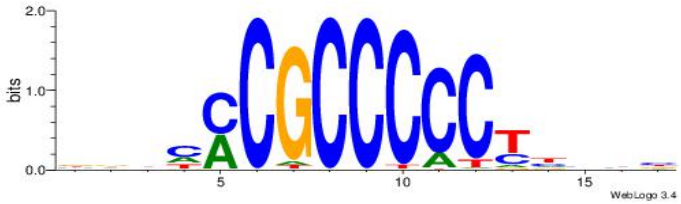
Motif ID:	UP00002
Motif name:	Sp4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	15
Similarity score:	0.020698

Alignment:

```
BDHHMCGCCCCCTHVBB
SVCCACSVSCACCBS--
```

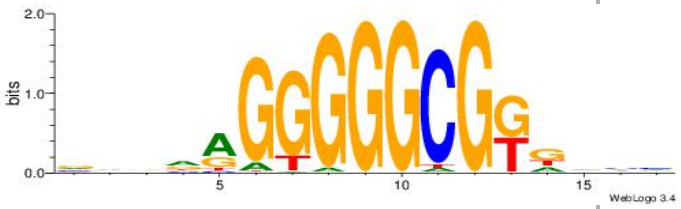
Original motif

Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif

Consensus sequence: BVVHAGGGGGCGRDHHB



Motif ID:	UP00539

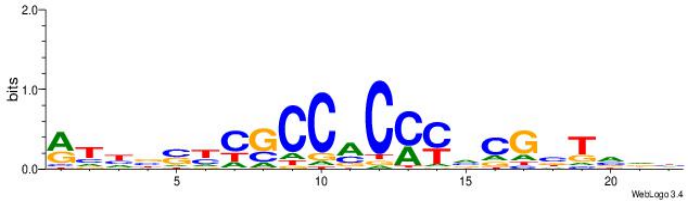
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	15
Similarity score:	0.0211186

Alignment:

```
HDBABCGBKRGYGGCGMSBHAK
-SBGGTGSVSGTGGVS------
```

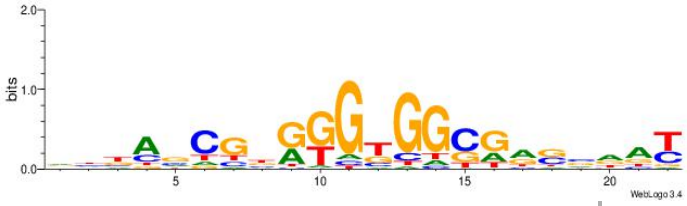
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK

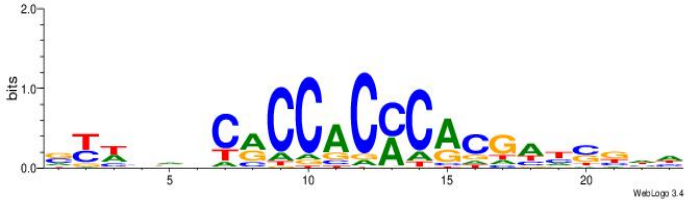


Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	15

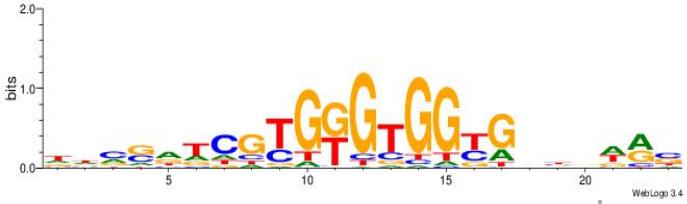
Similarity score: 0.022472

Alignment:
VYWVVHCRCCACMCACGAHSBHH
------SVCCACSVSCACCBS--

Original motif
Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif
Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV

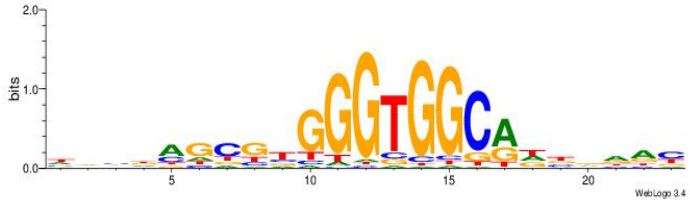


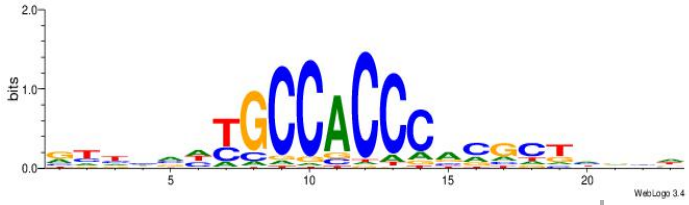
Motif ID: UP00538
Motif name: Gli1_v016060_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 7
Number of overlap: 15
Similarity score: 0.0250115

Alignment:
BDDHVDKGCCACCCVCGCTDBVH
------SVCCACSVSCACCBS--

Original motif
Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB

Reverse complement motif
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH

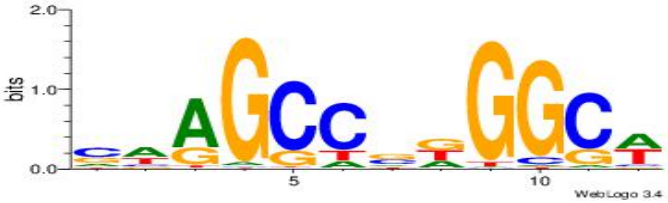




Dataset #: 1 **Motif ID: 72** **Motif name: C072**

Original motif

Consensus sequence: SWAGCCVDGGCW



Reverse complement motif

Consensus sequence: WGCCHVGGCTWS

Best Matches for Motif ID 72 (Highest to Lowest)

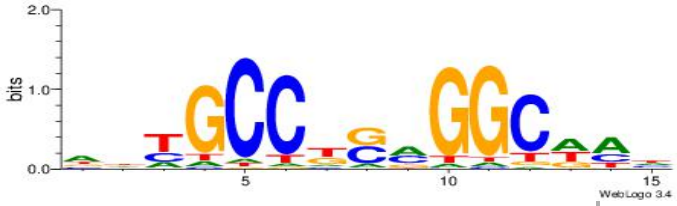
Motif ID:	UP00010
Motif name:	Tcfap2b_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	12
Similarity score:	0.00558864

Alignment:

HHKGCCYSRGGCWAD
-SWAGCCVDGGCW--

Original motif
Consensus sequence: DTWGCCKSMGGCRHH

Reverse complement motif
Consensus sequence: HHKGCCYSRGGCWAD

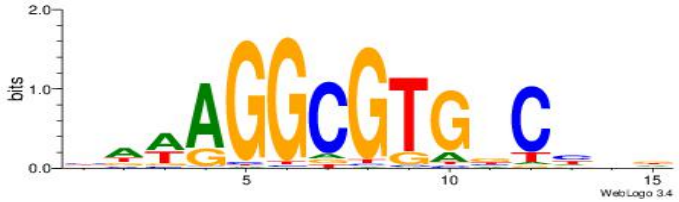


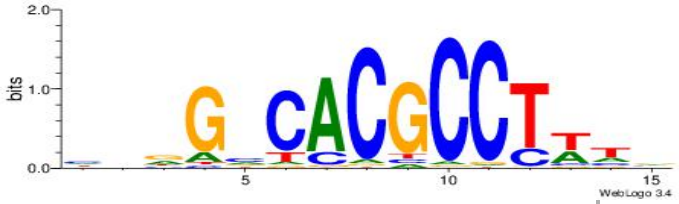
Motif ID:	UP00002
Motif name:	Sp4_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	12
Similarity score:	0.00743548

Alignment:
BDWAGGCGTGBCHHD
-SWAGCCVDGGCW--

Original motif
Consensus sequence: BDWAGGCGTGBCHHD

Reverse complement motif
Consensus sequence: HHDGBCACGCCTWDB





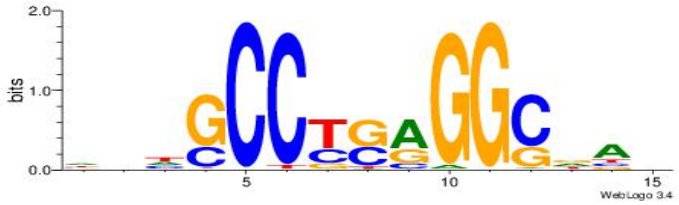
Motif ID:	UP00028
Motif name:	Tcfap2e_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	12
Similarity score:	0.0141542

Alignment:

```
HHHGCCTSAGGCDAD
-SWAGCCVDGGCW--
```

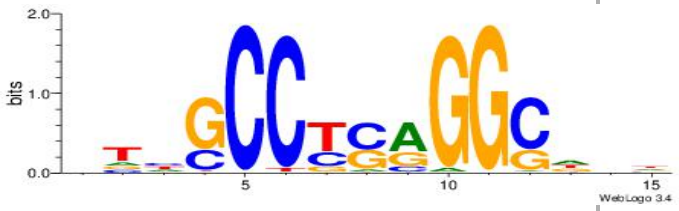
Original motif

Consensus sequence: HHHGCCTSAGGCDAD



Reverse complement motif

Consensus sequence: DTHGCCTSAGGCHHH



Motif ID:	UP00087

Motif name:	Tcfap2c_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:	0.0187577

Alignment:

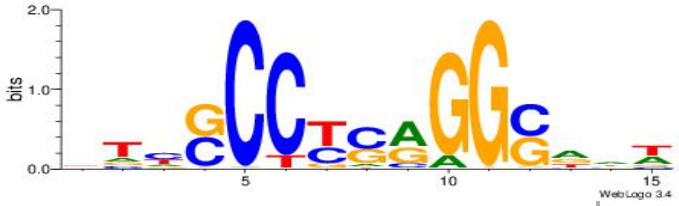
```
WHHSCCYSRGGSDAD
--WGCCHVGGCTWS-
```

Original motif

Consensus sequence: WHHSCCYSRGGSDAD

Reverse complement motif

Consensus sequence: DTHSCCKSMGGSHHW

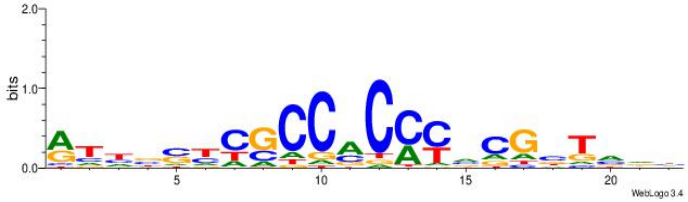


Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	12

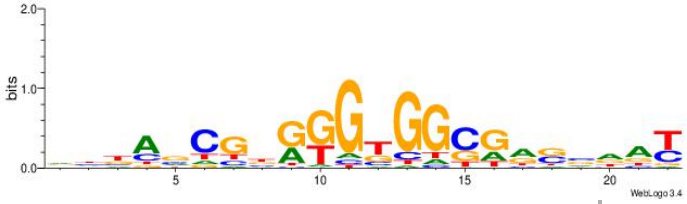
Similarity score: 0.0187696

Alignment:
HDBABCGBKRGYGGCGMSBHAK
-SWAGCCVDGGCW---------

Original motif
Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH

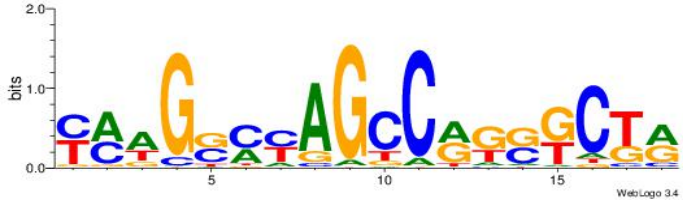


Reverse complement motif
Consensus sequence: HDBABCGBKRGYGGCGMSBHAK

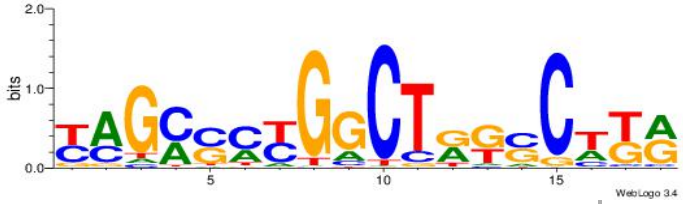


Dataset #: 1 Motif ID: 73 Motif name: C073

Original motif
Consensus sequence: YMWGSMYAGCCRKSKCTR



Reverse complement motif
Consensus sequence: KAGYSYKGGCTKRSCWYK



Best Matches for Motif ID 73 (Highest to Lowest)

Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif

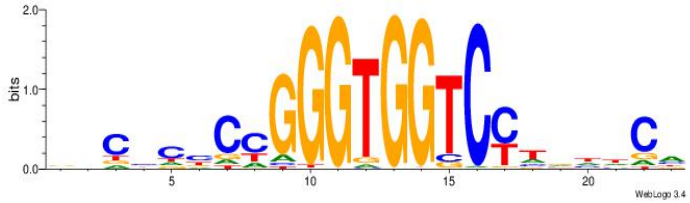
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	18
Similarity score:	0.0271167

Alignment:

```
HGDHVHKGACCACCCGGBGBGDB
----YMWGSMYAGCCRKSKCTR-
```

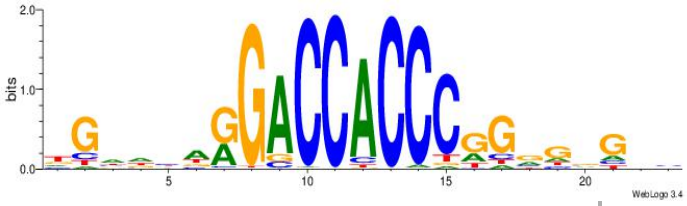
Original motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif

Consensus sequence: HGDHVHKGACCACCCGGBGBGDB



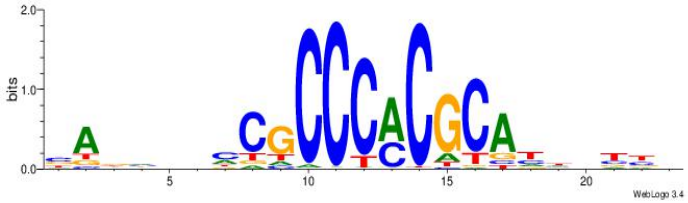
Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	18
Similarity score:	0.0280669

Alignment:

VVVDHHTGCGYGGGCGDHVHHTB
-----KAGYSYKGGCTKRSCWYK

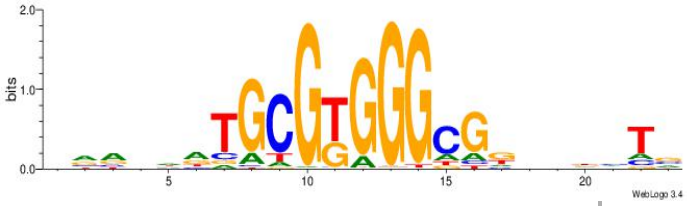
Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif

Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB



Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	18
Similarity score:	0.0284377

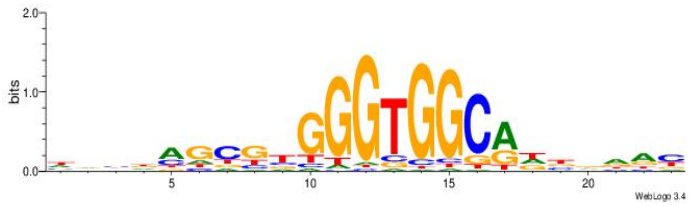
Alignment:
BDDHVDKGCCACCCVCGCTDBVH
---YMWGSMYAGCCRKSKCTR--

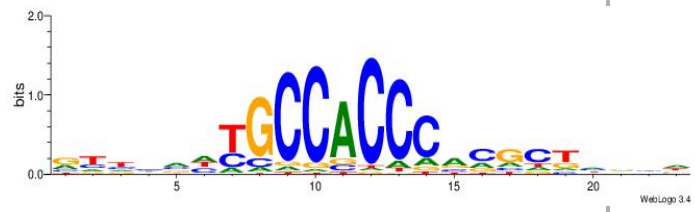
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB

Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH





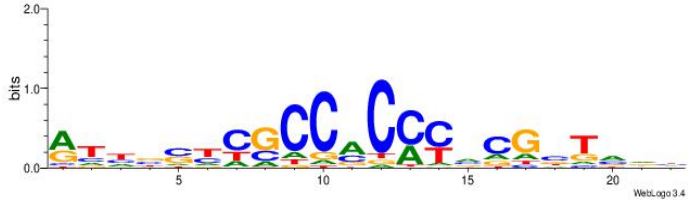
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	18
Similarity score:	0.0313979

Alignment:

```
HDBABCGBKRGYGGCGMSBHAK
--KAGYSYKGGCTKRSCWYK--
```

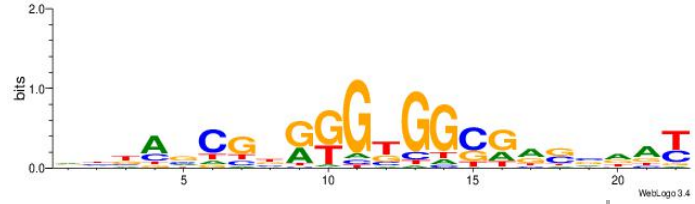
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



Motif ID: UP00538

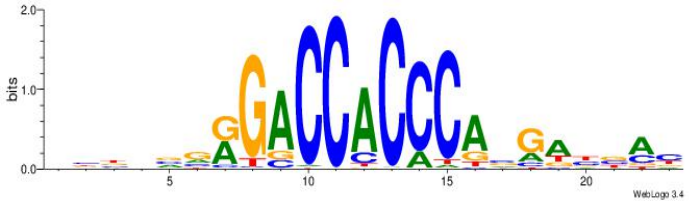
Motif name:	Gli1_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	18
Similarity score:	0.032852

Alignment:

```
BBBDVVRGACCACCCAVGABBAB
----YMWGSMYAGCCRKSKCTR-
```

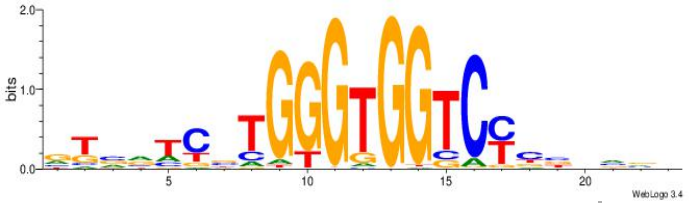
Original motif

Consensus sequence: BBBDVVRGACCACCCAVGABBAB



Reverse complement motif

Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB



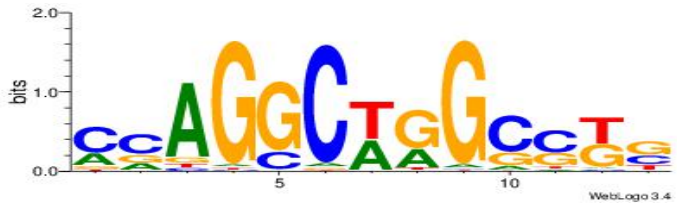
Dataset #: 1 **Motif ID: 74** **Motif name: C074**

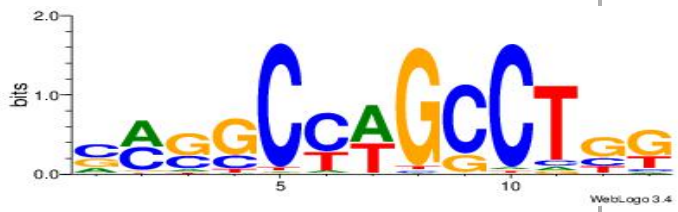
Original motif

Consensus sequence: CCAGGCWGGCSKS

Reverse complement motif

Consensus sequence: SRSGCCWGCCTGG





Best Matches for Motif ID 74 (Highest to Lowest)

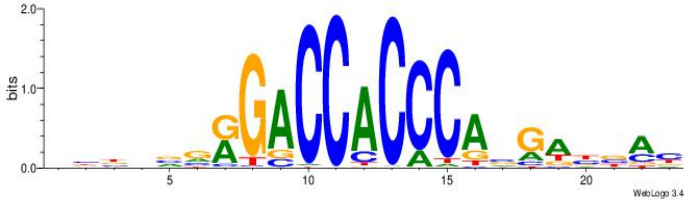
Motif ID:	UP00538
Motif name:	Gli1_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	13
Similarity score:	0.0257723

Alignment:

```
BBBDVVRGACCACCCAVGABBAB
-----SRSGCCWGCCTGG-----
```

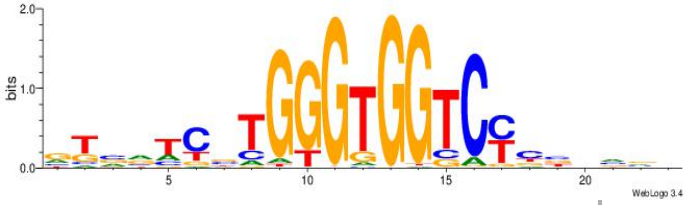
Original motif

Consensus sequence: BBBDVVRGACCACCCAVGABBAB



Reverse complement motif

Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB



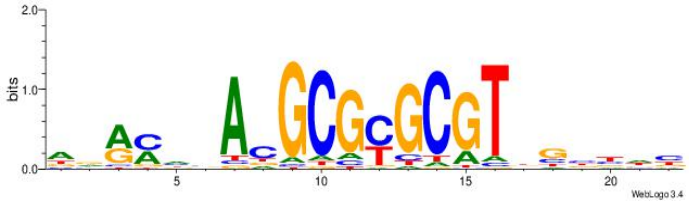
Motif ID:	UP00526
Motif name:	Foxn1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	13
Similarity score:	0.0270649

Alignment:

```
DDRMHBACGCGYGCGTDGBBDB
-----SRSGCCWGCCTGG----
```

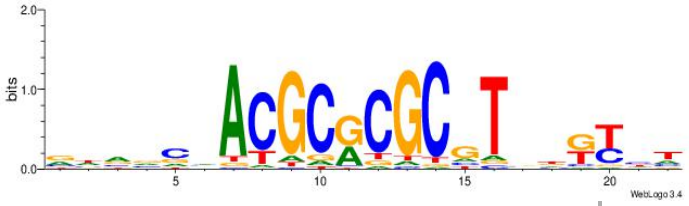
Original motif

Consensus sequence: DDRMHBACGCGYGCGTDGBBDB



Reverse complement motif

Consensus sequence: BDVBCDACGCKCGCGTBHRKHD

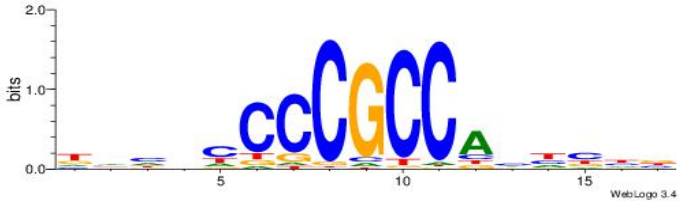


Motif ID:	UP00000
Motif name:	Smad3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2

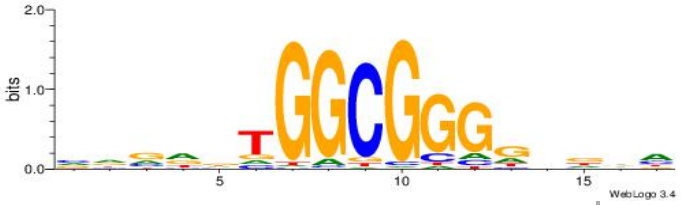
Number of overlap: 13
Similarity score: 0.0283276

Alignment:
BHBHDTGGCGGGGBDHD
---CCAGGCWGGCSKS-

Original motif
Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif
Consensus sequence: BHBHDTGGCGGGGBDHD



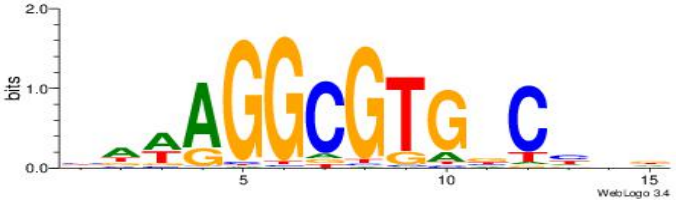
Motif ID: UP00002
Motif name: Sp4_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 2
Number of overlap: 13
Similarity score: 0.0313235

Alignment:
HHDGBCACGCCTWDB
-SRSGCCWGCCTGG-

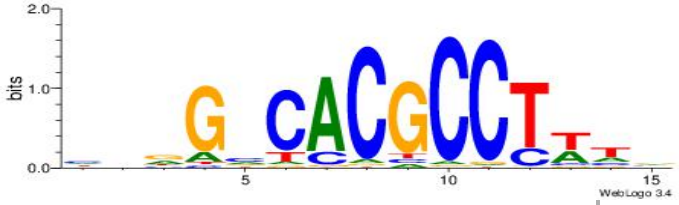
Original motif

Reverse complement motif

Consensus sequence: BDWAGGCGTGBCHHD



Consensus sequence: HHDGBCACGCCTWDB



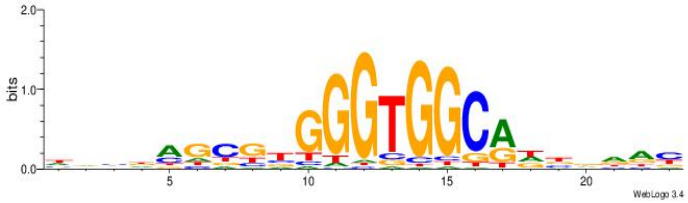
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	13
Similarity score:	0.0327573

Alignment:

```
HVBDAGCGBGGGTGGCRDBDDDB
------CCAGGCWGGCSKS----
```

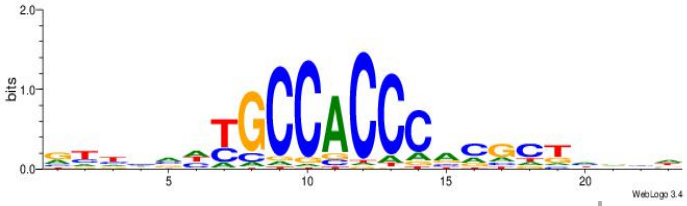
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

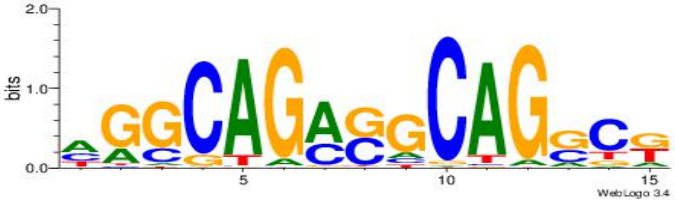
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



Dataset #: 1 **Motif ID: 75** **Motif name: C075**

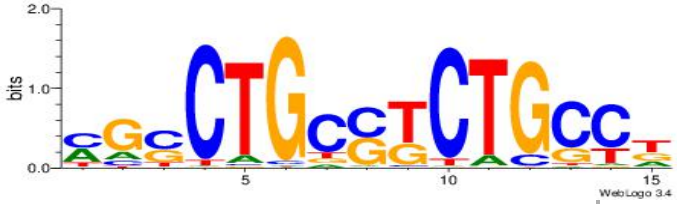
Original motif

Consensus sequence: MGGCAGMSGCAGSCK



Reverse complement motif

Consensus sequence: YGSCTGCSYCTGCCY



Best Matches for Motif ID 75 (Highest to Lowest)

Motif ID:	UP00099
Motif name:	Ascl2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	15
Similarity score:	0.0343574

Alignment:

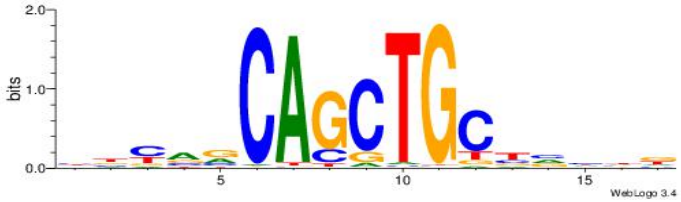
```
BBYVVCAGCTGCBVHHD
--MGGCAGMSGCAGSCK
```

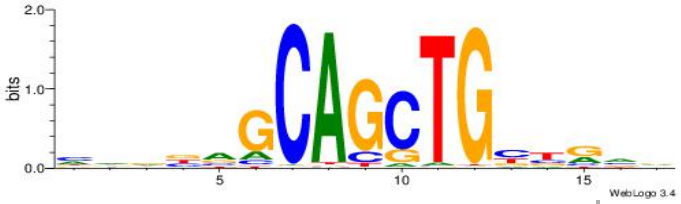
Original motif

Consensus sequence: BBYVVCAGCTGCBVHHD

Reverse complement motif

Consensus sequence: HHDVVGCAGCTGVBKVB





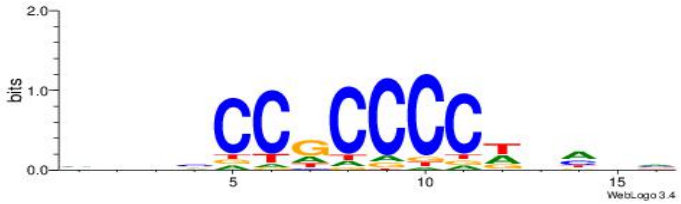
Motif ID:	UP00043
Motif name:	Bcl6b_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	15
Similarity score:	0.0352972

Alignment:

```
HBBBCCGCCCCWHHHV
-YGSCTGCSYCTGCCY
```

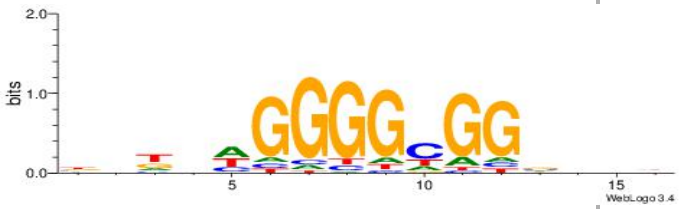
Original motif

Consensus sequence: HBBBCCGCCCCWHHHV



Reverse complement motif

Consensus sequence: BHHHWGGGGCGGBBVH



Motif ID:	UP00079

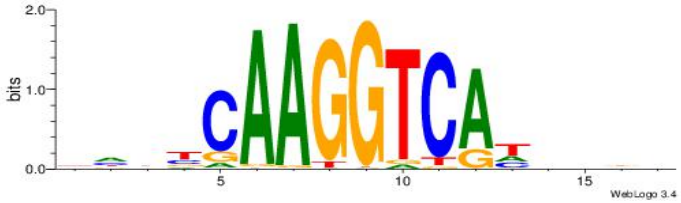
Motif name:	Esrra_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	15
Similarity score:	0.0363915

Alignment:

```
HHBVHTGACCTTGVDHD
-YGSCTGCSYCTGCCY-
```

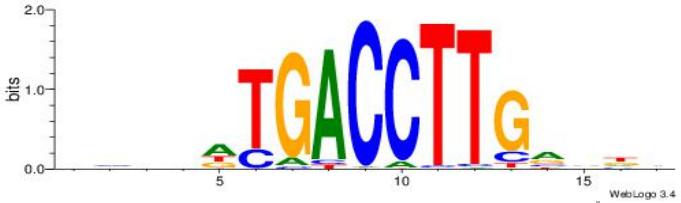
Original motif

Consensus sequence: DHDBCAAGGTCAHVBDH



Reverse complement motif

Consensus sequence: HHBVHTGACCTTGVDHD

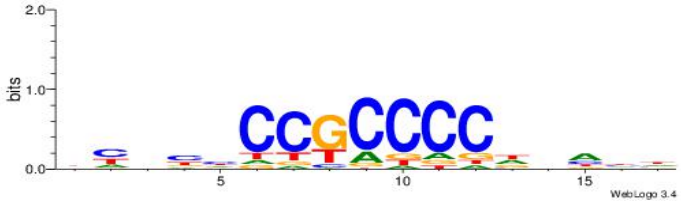


Motif ID:	UP00033
Motif name:	Zfp410_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	15

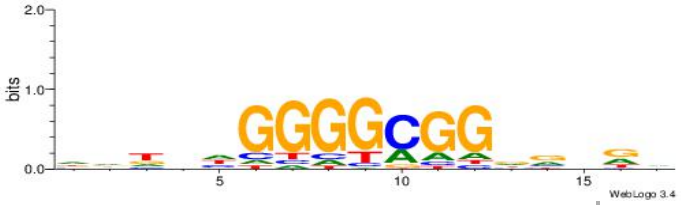
Similarity score: 0.036959

Alignment:
BHHBHCCGCCCCDHHHH
--YGSCTGCSYCTGCCY

Original motif
Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif
Consensus sequence: HHHHDGGGGCGGDBHDV

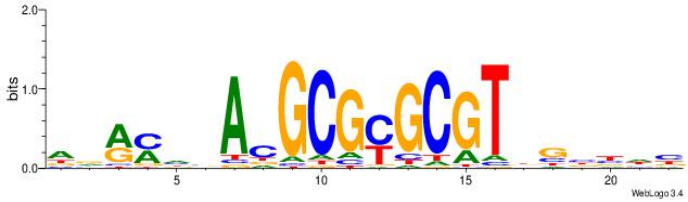


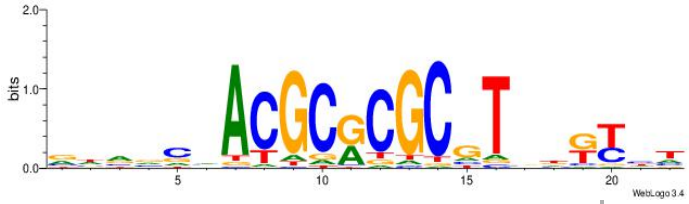
Motif ID:	UP00526
Motif name:	Foxn1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	15
Similarity score:	0.0381017

Alignment:
DDRMHBACGCGYGCGTDGBBDB
MGGCAGMSGCAGSCK-------

Original motif
Consensus sequence: DDRMHBACGCGYGCGTDGBBDB

Reverse complement motif
Consensus sequence: BDVBCDACGCKCGCGTBHRKHD

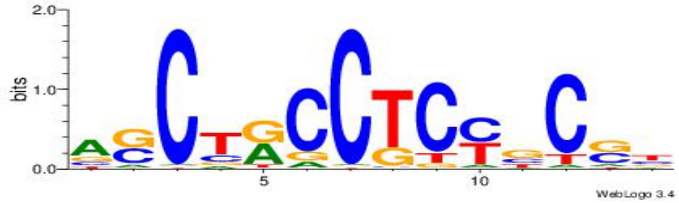




Dataset #: 1 **Motif ID: 76** **Motif name: C076**

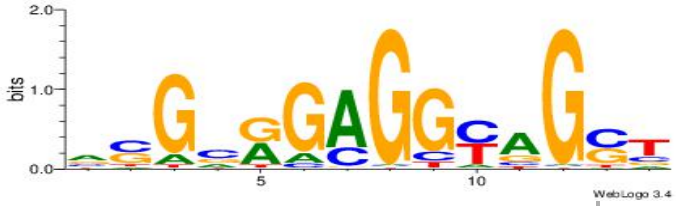
Original motif

Consensus sequence: ASCTRCCTCYBCSB



Reverse complement motif

Consensus sequence: VSGBKGAGGMAGST



Best Matches for Motif ID 76 (Highest to Lowest)

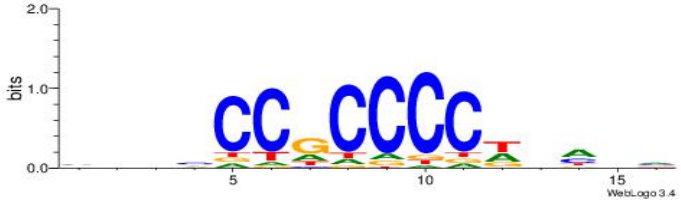
Motif ID:	UP00043
Motif name:	Bcl6b_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0266758

Alignment:

```
BHHHWGGGGCGGBBVH
VSGBKGAGGMAGST--
```

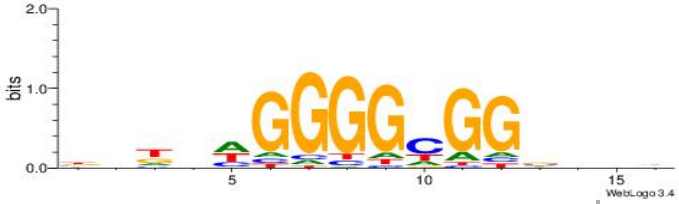
Original motif

Consensus sequence: HBBBCCGCCCCWHHHV



Reverse complement motif

Consensus sequence: BHHHWGGGGCGGBBVH



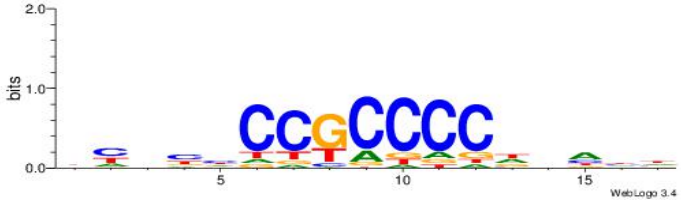
Motif ID:	UP00033
Motif name:	Zfp410_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	14
Similarity score:	0.0272671

Alignment:

```
HHHHDGGGGCGGDBHDV
VSGBKGAGGMAGST---
```

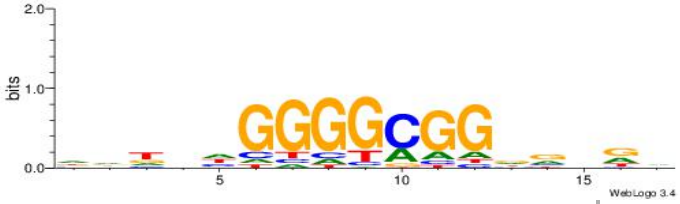
Original motif

Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif

Consensus sequence: HHHHDGGGGCGGDBHDV



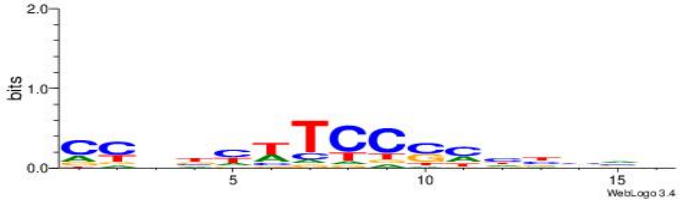
Motif ID:	UP00013
Motif name:	Gabpa_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0302132

Alignment:

```
DBVVDRSGGAWKVHKG
VSGBKGAGGMAGST--
```

Original motif

Consensus sequence: CYDBYWTCCSMHBVVH



Reverse complement motif

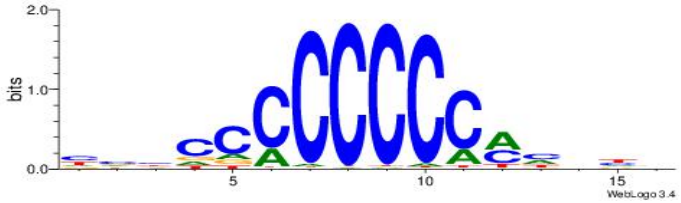
Consensus sequence: DBVVDRSGGAWKVHKG

Motif ID:	UP00022
Motif name:	Zfp740_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2

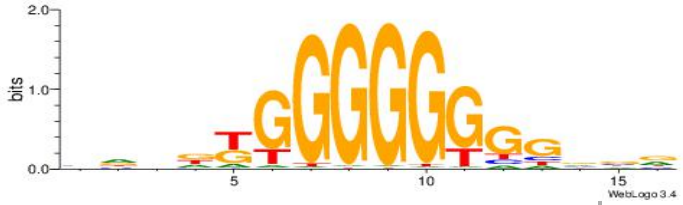
Number of overlap: 14
Similarity score: 0.0328017

Alignment:
BHHDYGGGGGGGGBVD
-VSGBKGAGGMAGST-

Original motif
Consensus sequence: HVBCCCCCCCCMHHHB



Reverse complement motif
Consensus sequence: BHHDYGGGGGGGGBVD



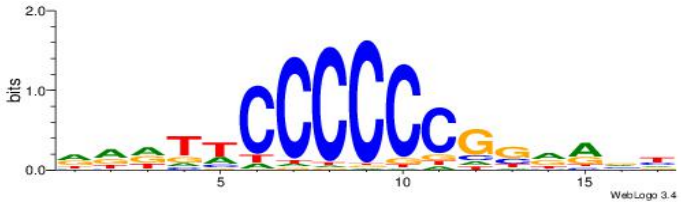
Motif ID: UP00022
Motif name: Zfp740_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 4
Number of overlap: 14
Similarity score: 0.0330521

Alignment:
HVKDCCGGGGGGWADDD
---VSGBKGAGGMAGST

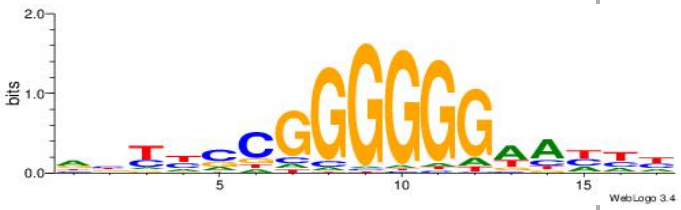
Original motif

Reverse complement motif

Consensus sequence: DDDTWCCCCCCGGDRVH



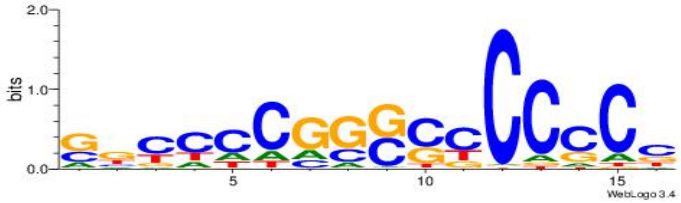
Consensus sequence: HVKDCCGGGGGGWADDD



Dataset #: 1 **Motif ID: 77** **Motif name: C077**

Original motif

Consensus sequence: SBCCCCGGSSCCCCCB



Reverse complement motif

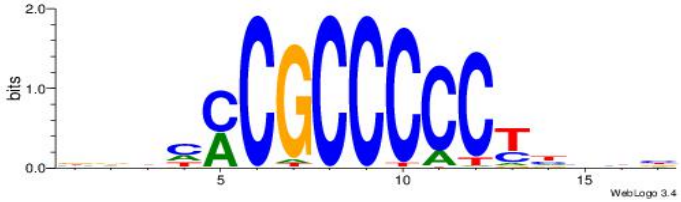
Consensus sequence: BGGGGGSSCCGGGGBS

Best Matches for Motif ID 77 (Highest to Lowest)

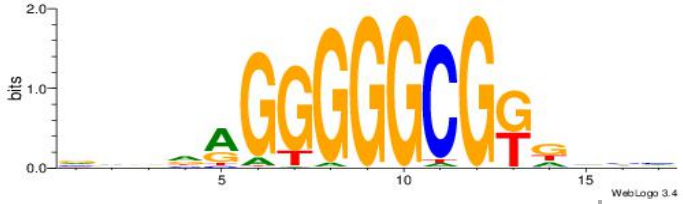
Motif ID:	UP00002
Motif name:	Sp4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	16
Similarity score:	0.0480753

Alignment:
BDHHMCGCCCCCTHVBB
SBCCCCGGSSCCCCCB-

Original motif
Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif
Consensus sequence: BVVHAGGGGGCGRDHHB

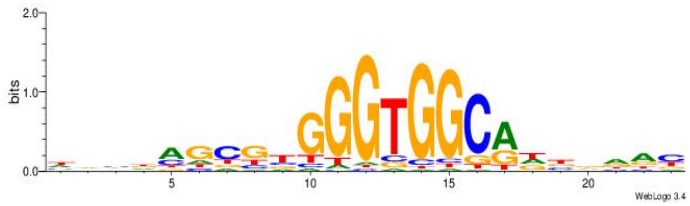


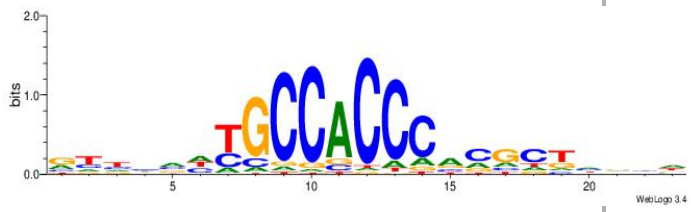
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	16
Similarity score:	0.0484396

Alignment:
HVBDAGCGBGGGTGGCRDBDDDB
-------BGGGGGSSCCGGGGBS

Original motif
Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB

Reverse complement motif
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH





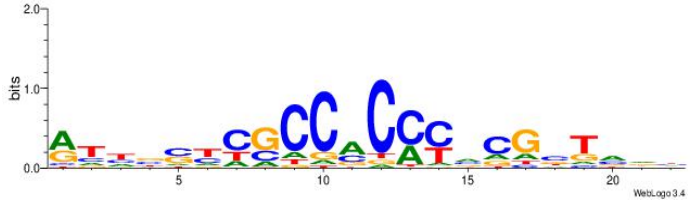
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	16
Similarity score:	0.0490479

Alignment:

```
RTHBSYCGCCMCMYVCGBTVDH
SBCCCCGGSSCCCCCB------
```

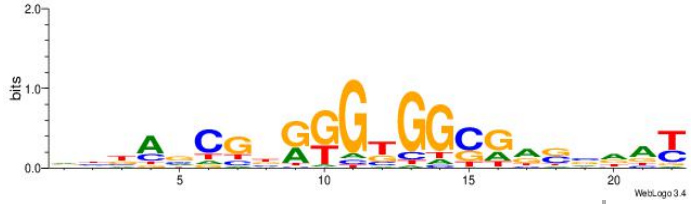
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



Motif ID:	UP00033

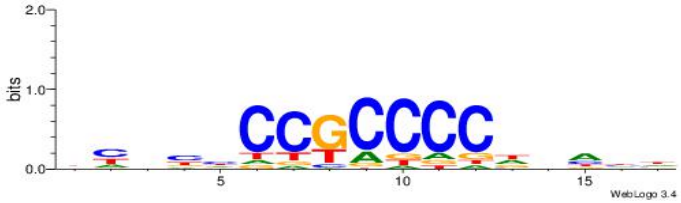
Motif name:	Zfp410_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	16
Similarity score:	0.0535184

Alignment:

```
HHHHDGGGGCGGDBHDV
-BGGGGGSSCCGGGGBS
```

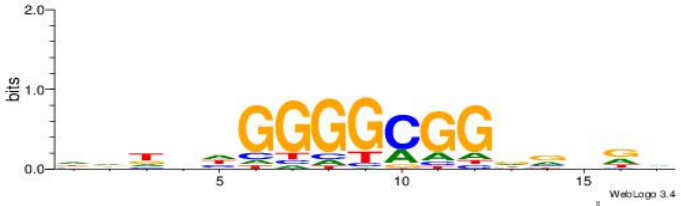
Original motif

Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif

Consensus sequence: HHHHDGGGGCGGDBHDV



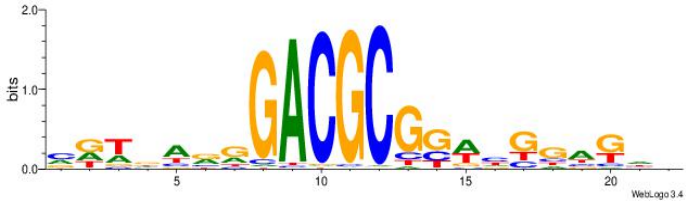
Motif ID:	UP00527
Motif name:	Foxn4_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	16
Similarity score:	0.0543092

Alignment:

VDWDARRGACGCGGWHGGAKHV
SBCCCCGGSSCCCCCB------

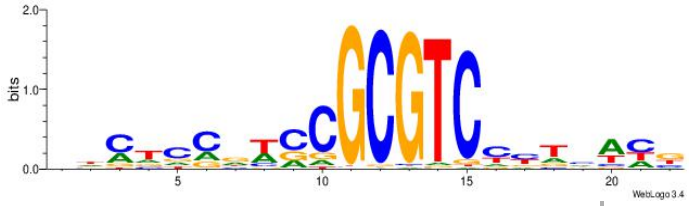
Original motif

Consensus sequence: VDWDARRGACGCGGWHGGAKHV



Reverse complement motif

Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV



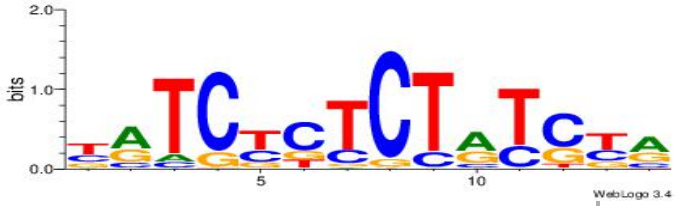
Dataset #: 1 Motif ID: 78 Motif name: C078

Original motif

Consensus sequence: YRGAYAGAGRGAYR

Reverse complement motif

Consensus sequence: KMTCKCTCTMTCKM



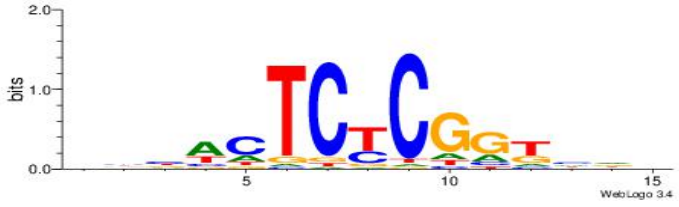
Best Matches for Motif ID 78 (Highest to Lowest)

Motif ID:	>UP00011
Motif name:	Irf6_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1

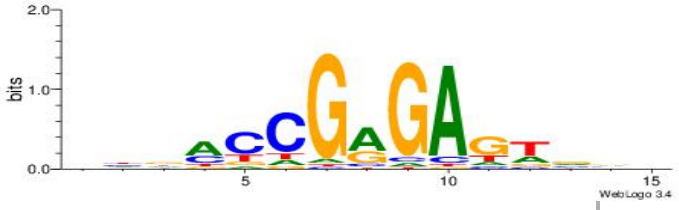
Number of overlap: 14
Similarity score: 0.0289623

Alignment:
VBBACTCYCGGKHDV
-KMTCKCTCTMTCKM

Original motif
Consensus sequence: VBBACTCYCGGKHDV



Reverse complement motif
Consensus sequence: VDDRCCGMGAGTBBB



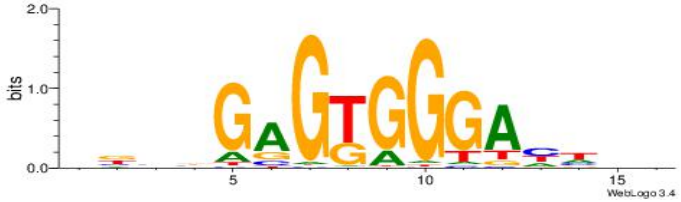
Motif ID: UP00007
Motif name: Egr1_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 1
Number of overlap: 14
Similarity score: 0.0334841

Alignment:
BHHDTCCCACTCBDBV
--KMTCKCTCTMTCKM

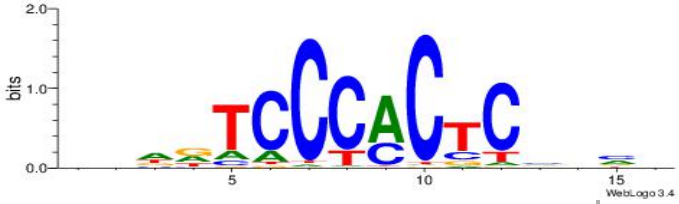
Original motif

Reverse complement motif

Consensus sequence: BBHBGAGTGGGAHHDB



Consensus sequence: BHHDTCCCACTCBDBV



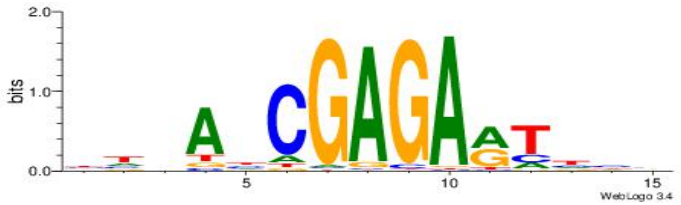
Motif ID:	UP00040
Motif name:	Irf5_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0339287

Alignment:

```
BHDAHCGAGARTHBV
YRGAYAGAGRGAYR-
```

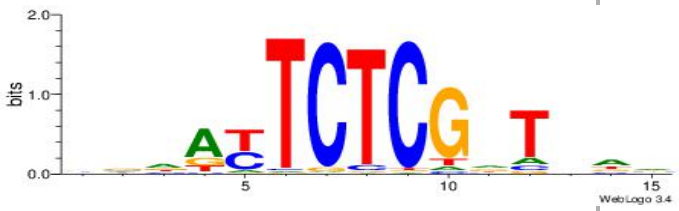
Original motif

Consensus sequence: BHDAHCGAGARTHBV



Reverse complement motif

Consensus sequence: VBHAKTCTCGHTHHV



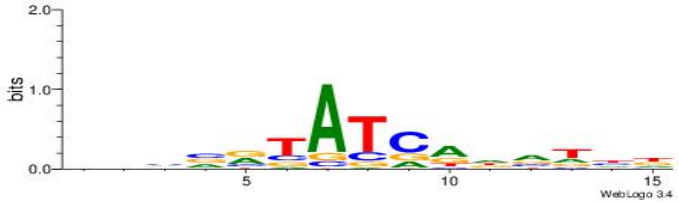
Motif ID:	UP00078
Motif name:	Arid3a_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	14
Similarity score:	0.0352486

Alignment:

```
HHVVRTATCRDVDHD
-YRGAYAGAGRGAYR
```

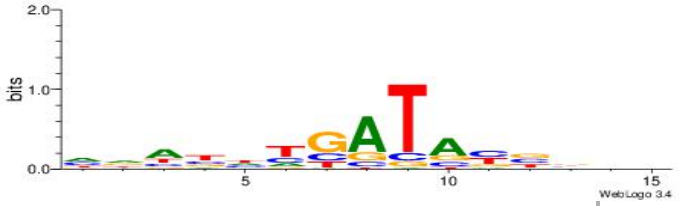
Original motif

Consensus sequence: HHVVRTATCRDVDHD



Reverse complement motif

Consensus sequence: DHDBDKGATAMVVDH

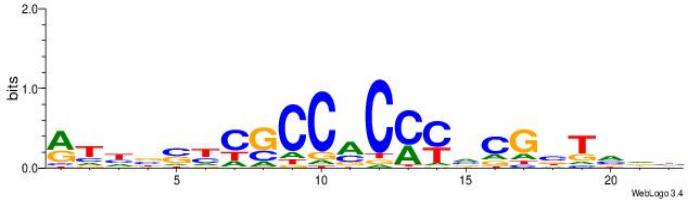


Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	8

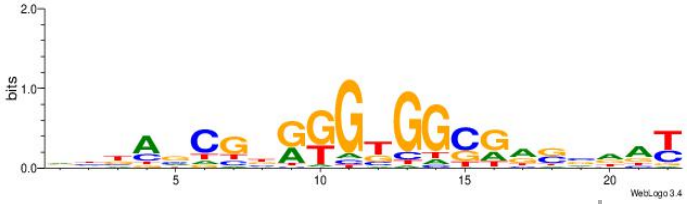
Number of overlap: 14
Similarity score: 0.0392148

Alignment:
HDBABCGBKRGYGGCGMSBHAK
-------YRGAYAGAGRGAYR-

Original motif
Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH

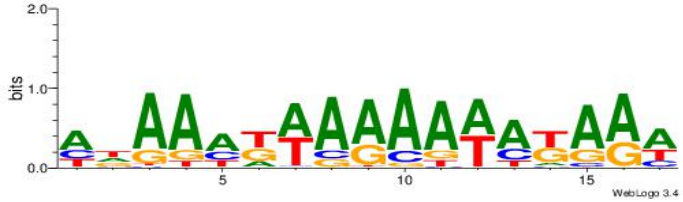


Reverse complement motif
Consensus sequence: HDBABCGBKRGYGGCGMSBHAK

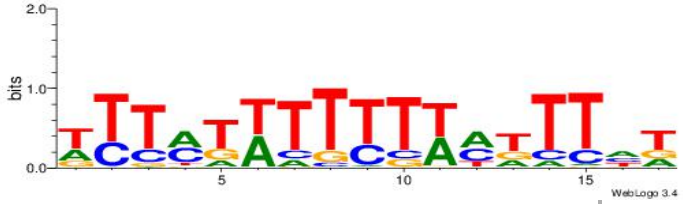


Dataset #: 1 Motif ID: 79 Motif name: C079

Original motif
Consensus sequence: ADAAAKWAAAAWAKARW



Reverse complement motif
Consensus sequence: WKTRTWTTTTWRTTTDT



Best Matches for Motif ID 79 (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:	1
Number of overlap:	17
Similarity score:	0.0265367

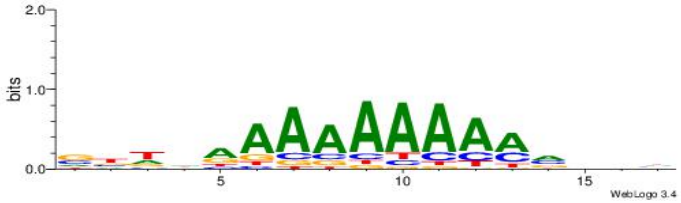
Alignment:

VBDDAAAAAAAAMVBHH

ADAAAKWAAAAWAKARW

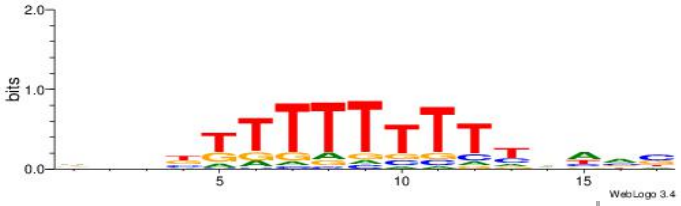
Original motif

Consensus sequence: VBDDAAAAAAAAMVBHH



Reverse complement motif

Consensus sequence: HHVBYTTTTTTTTDDVV



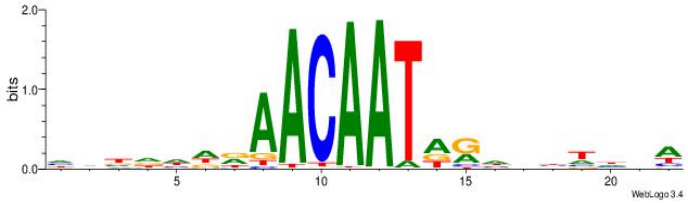
Motif ID:	UP00034
Motif name:	Sox7_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	17
Similarity score:	0.0319437

Alignment:

WBHHHHHMDATTGTTHDHDVHH
----WKTRTWTTTTWRTTTDT-

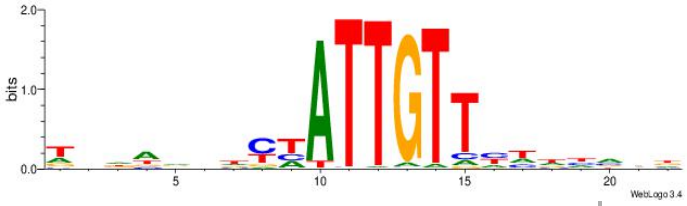
Original motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW



Reverse complement motif

Consensus sequence: WBHHHHHMDATTGTTHDHDVHH



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:	1
Number of overlap:	17
Similarity score:	0.0359246

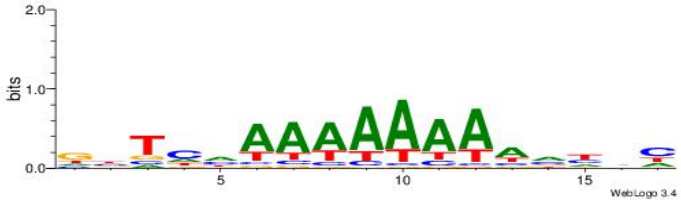
Alignment:
DBTHHAAAAAAAAVHDH
ADAAAKWAAAAWAKARW

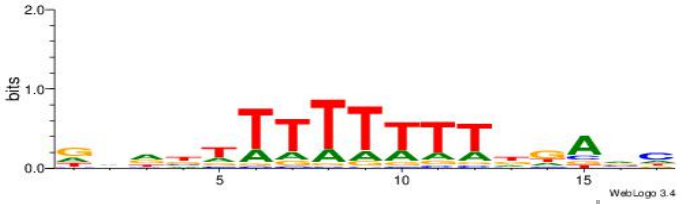
Original motif

Consensus sequence: DBTHHAAAAAAAAVHDH

Reverse complement motif

Consensus sequence: DDHBTTTTTTTTHDAVH





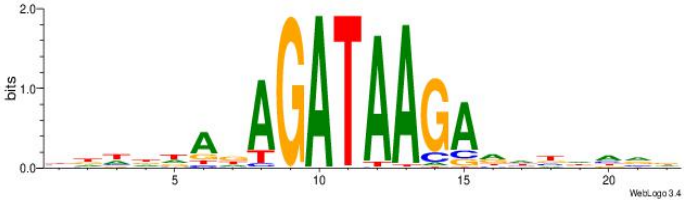
Motif ID:	UP00032
Motif name:	Gata3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	17
Similarity score:	0.036697

Alignment:

```
BDHDDADAGATAAGADHBDHVD
-----ADAAAKWAAAAWAKARW
```

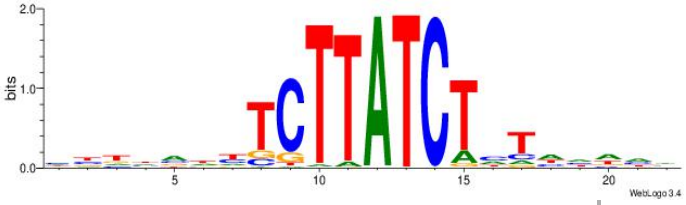
Original motif

Consensus sequence: BDHDDADAGATAAGADHBDHVD



Reverse complement motif

Consensus sequence: HBHDVHDTCTTATCTHTDDHDV



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:	1
Number of overlap:	17
Similarity score:	0.0381106

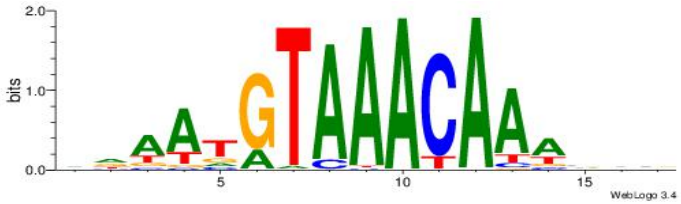
Alignment:

DDAATGTAAACAAAVVB

ADAAAKWAAAAWAKARW

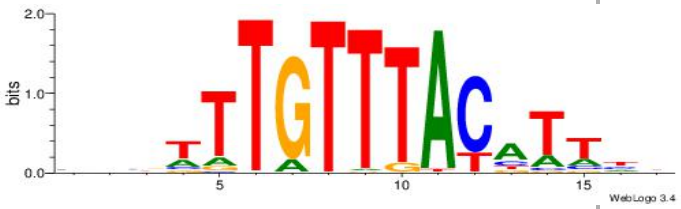
Original motif

Consensus sequence: DDAATGTAAACAAAVVB



Reverse complement motif

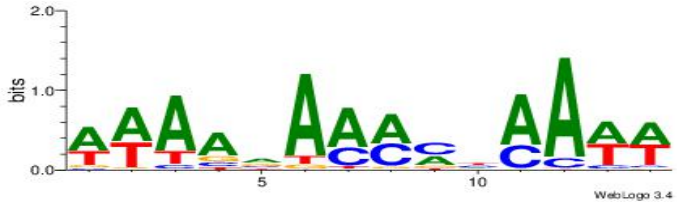
Consensus sequence: BBVTTTGTTTACATTDD



Dataset #: 1 Motif ID: 80 Motif name: C080

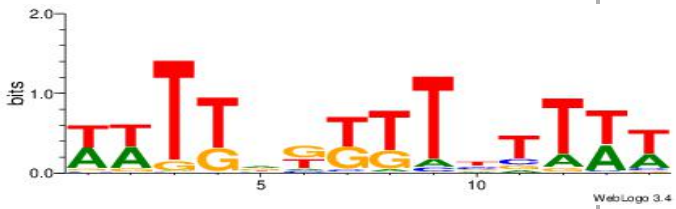
Original motif

Consensus sequence: WWAAVAAMMHAAWW



Reverse complement motif

Consensus sequence: WWTTHRYTTBTTWW



Best Matches for Motif ID 80 (Highest to Lowest)

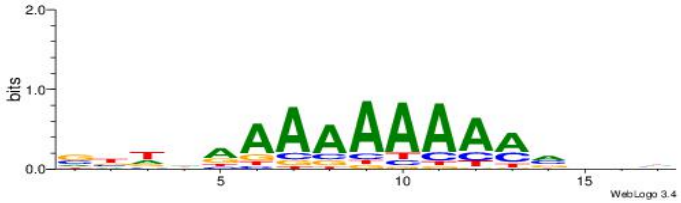
Motif ID:	UP00077
Motif name:	Srf_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0245388

Alignment:

```
VBDDAAAAAAAAMVBHH
---WWAAVAAMMHAAWW
```

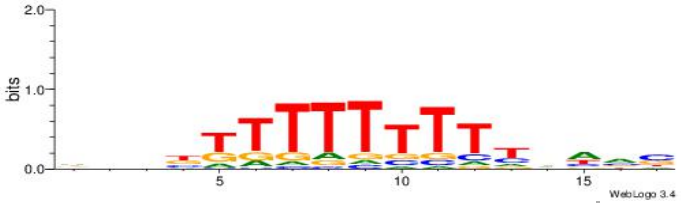
Original motif

Consensus sequence: VBDDAAAAAAAAMVBHH



Reverse complement motif

Consensus sequence: HHVBYTTTTTTTTDDVV

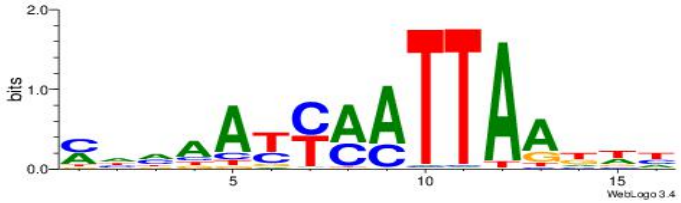


Motif ID:	UP00170
Motif name:	Isl2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward

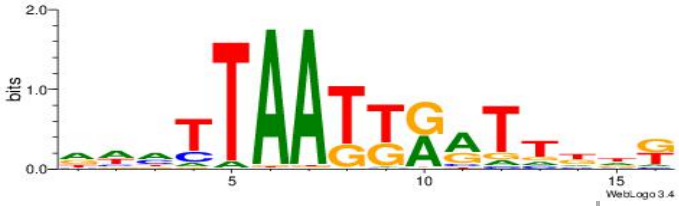
Position number:	2
Number of overlap:	14
Similarity score:	0.0341915

Alignment:
HWDTTAATYKMTTHHR
-WWTTHRYTTBTTWW-

Original motif
Consensus sequence: MHHAAYYMATTAADWH



Reverse complement motif
Consensus sequence: HWDTTAATYKMTTHHR



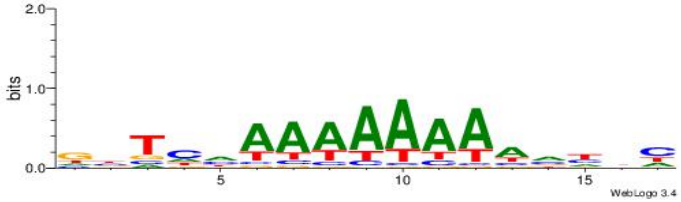
Motif ID:	UP00090
Motif name:	Elf3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0349632

Alignment:
DBTHHAAAAAAAAVHDH
---WWAAVAAMMHAAWW

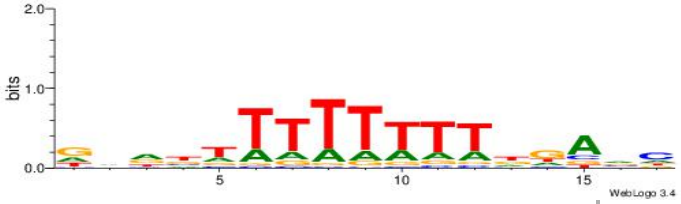
Original motif

Reverse complement motif

Consensus sequence: DBTHHAAAAAAAAVHDH



Consensus sequence: DDHBTTTTTTTTHDAVH



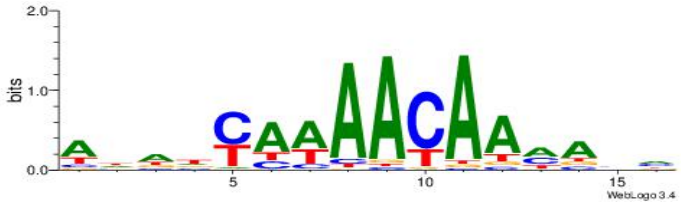
Motif ID:	UP00061
Motif name:	Foxl1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0362632

Alignment:

```
ADDDYAWAACAAMAHH
WWAAVAAMMHAAWW--
```

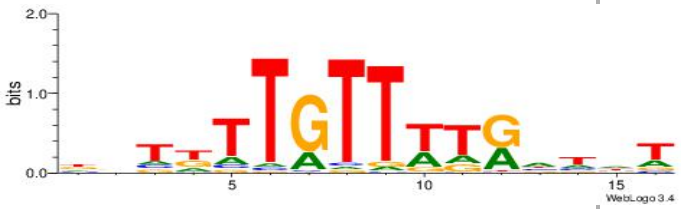
Original motif

Consensus sequence: ADDDYAWAACAAMAHH



Reverse complement motif

Consensus sequence: HDTYTTGTTWTKDDDT



Motif ID:	UP00037

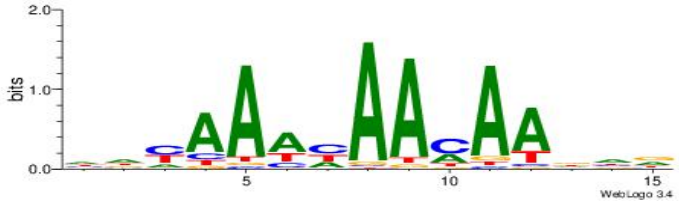
Motif name:	Zfp105_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0380401

Alignment:

```
HDYAAAHAAMAADHD
WWAAVAAMMHAAWW-
```

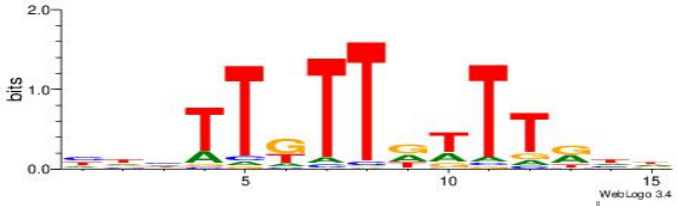
Original motif

Consensus sequence: HDYAAAHAAMAADHD



Reverse complement motif

Consensus sequence: HHHTTRTTDTTTKDH



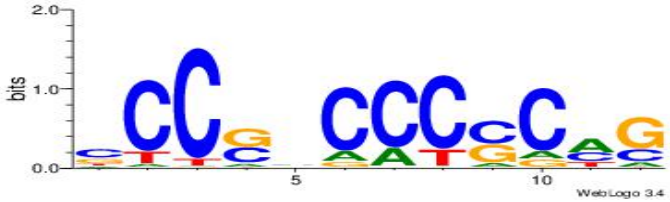
Dataset #: 1 **Motif ID: 81** **Motif name: C081**

Original motif

Consensus sequence: BCCSHCCCSCMG

Reverse complement motif

Consensus sequence: CYGSGGGHSGGB



Best Matches for Motif ID 81 (Highest to Lowest)

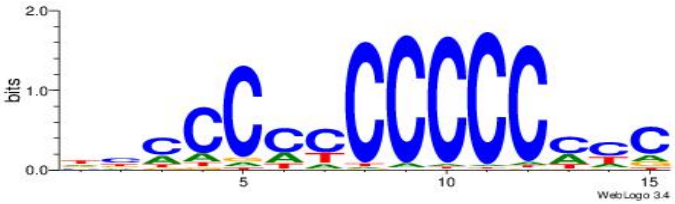
Motif ID:	UP00021
Motif name:	Zfp281_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	12
Similarity score:	0.0133435

Alignment:

```
DBCCCCCCCCCCMYC
--BCCSHCCCSCMG-
```

Original motif

Consensus sequence: DBCCCCCCCCCCMYC



Reverse complement motif

Consensus sequence: GKRGGGGGGGGGBD

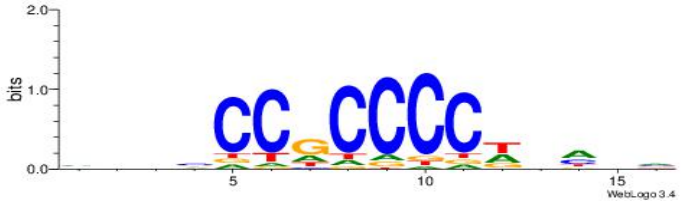
Motif ID:	UP00043
Motif name:	Bcl6b_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	12
Similarity score:	0.0173124

Alignment:

```
HBBBCCGCCCCWHHHV
---BCCSHCCCSCMG-
```

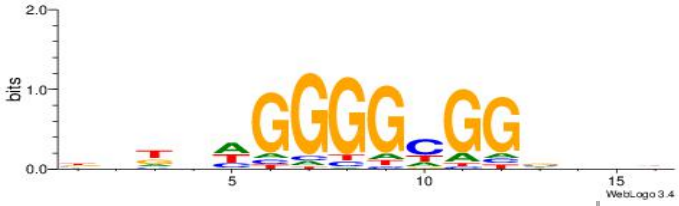
Original motif

Consensus sequence: HBBBCCGCCCCWHHHV



Reverse complement motif

Consensus sequence: BHHHWGGGGCGGBBVH

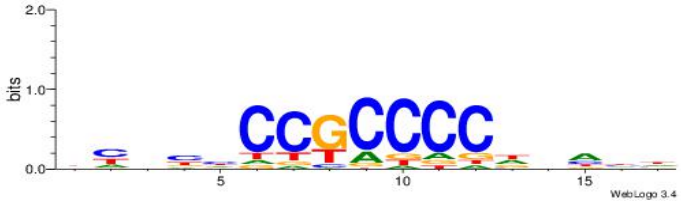


Motif ID:	UP00033
Motif name:	Zfp410_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2

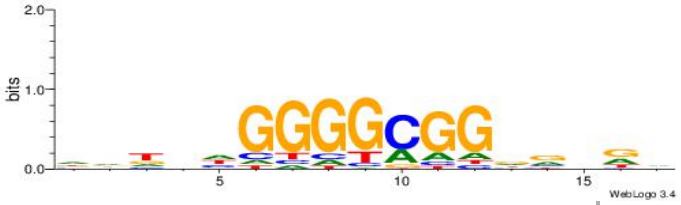
Number of overlap: 12
Similarity score: 0.0193295

Alignment:
BHHBHCCGCCCCDHHHH
----BCCSHCCCSCMG-

Original motif
Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif
Consensus sequence: HHHHDGGGGCGGDBHDV



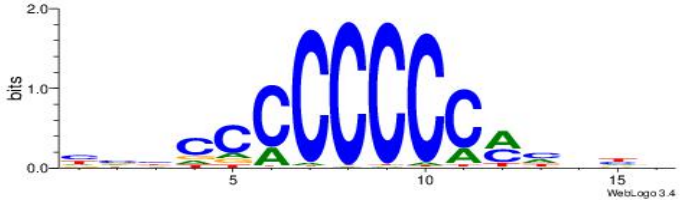
Motif ID: UP00022
Motif name: Zfp740_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 2
Number of overlap: 12
Similarity score: 0.0214278

Alignment:
HVBCCCCCCCCMHHHB
-BCCSHCCCSCMG---

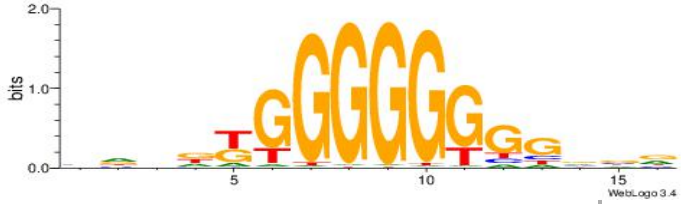
Original motif

Reverse complement motif

Consensus sequence: HVBCCCCCCCCMHHHB



Consensus sequence: BHHDYGGGGGGGGBVD



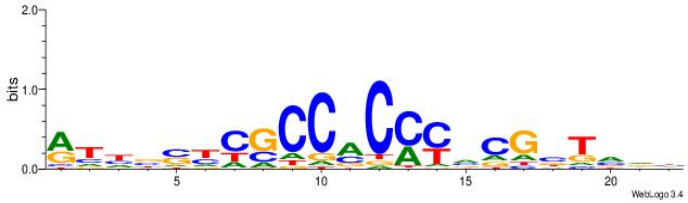
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	12
Similarity score:	0.0230163

Alignment:

```
HDBABCGBKRGYGGCGMSBHAK
----CYGSGGGHSGGB------
```

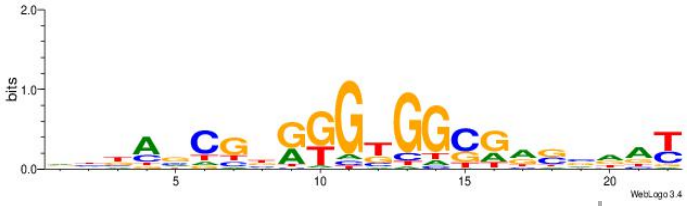
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

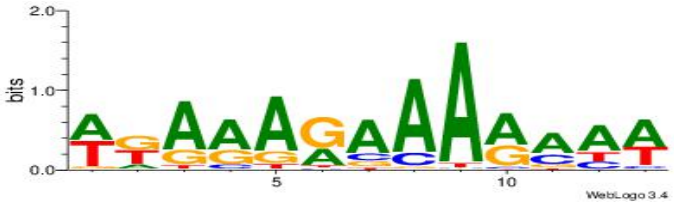
Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



Dataset #: 1 **Motif ID: 82** **Motif name: C082**

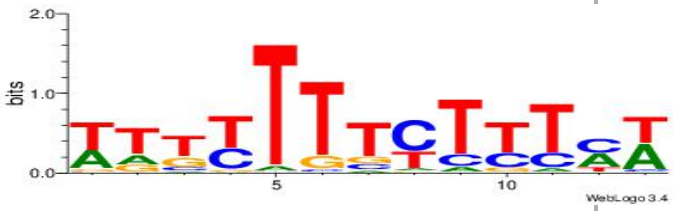
Original motif

Consensus sequence: WKAAARAAARAAW



Reverse complement motif

Consensus sequence: WTTKTTTMTTTYW



Best Matches for Motif ID 82 (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:	3
Number of overlap:	13
Similarity score:	0.0105695

Alignment:

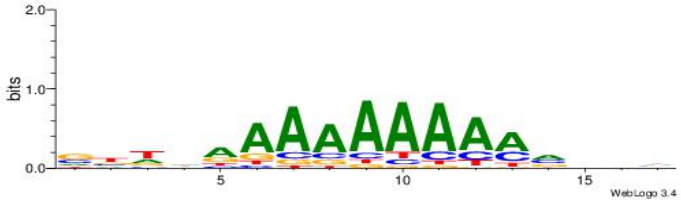
```
VBDDAAAAAAAAMVBHH
--WKAAARAAARAAW--
```

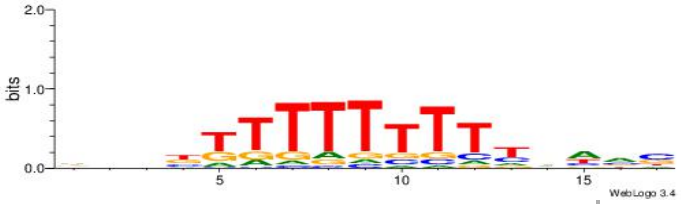
Original motif

Consensus sequence: VBDDAAAAAAAAMVBHH

Reverse complement motif

Consensus sequence: HHVBYTTTTTTTTDDVV





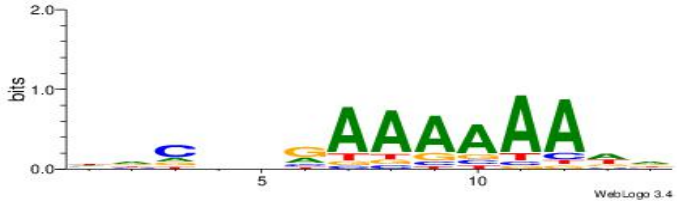
Motif ID:	UP00028
Motif name:	Tcfap2e_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	13
Similarity score:	0.0217842

Alignment:

```
DDTTTTTTMBDGDH
-WTTKTTTMTTTYW
```

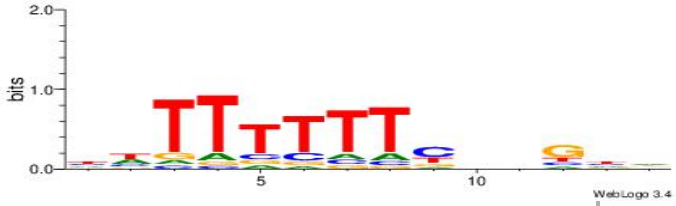
Original motif

Consensus sequence: HDCDBRAAAAAADD



Reverse complement motif

Consensus sequence: DDTTTTTTMBDGDH



Motif ID:	UP00037
Motif name:	Zfp105_primary

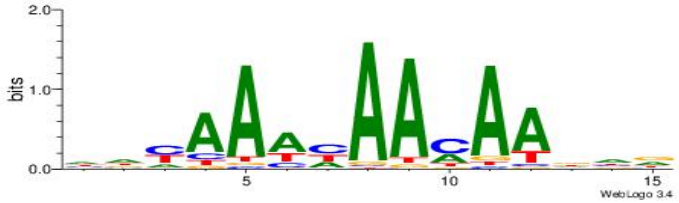
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	13
Similarity score:	0.0234988

Alignment:

```
HHHTTRTTDTTTKDH
--WTTKTTTMTTTYW
```

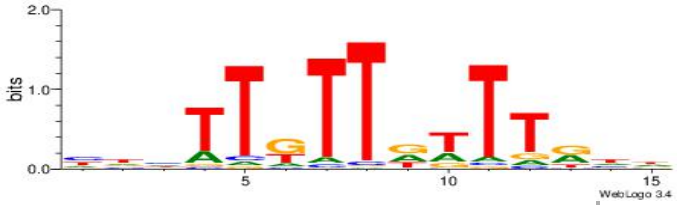
Original motif

Consensus sequence: HDYAAAHAAMAADHD



Reverse complement motif

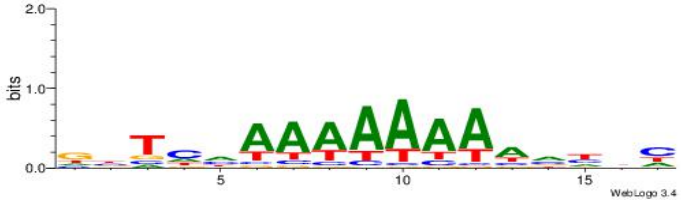
Consensus sequence: HHHTTRTTDTTTKDH



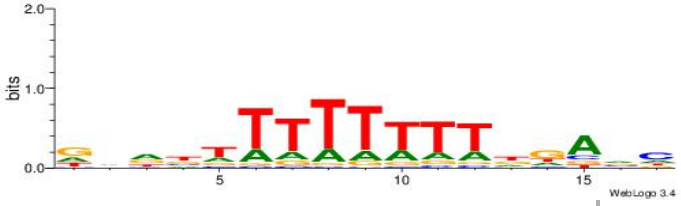
Motif ID:	UP00090
Motif name:	Elf3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	13
Similarity score:	0.0265681

Alignment:
DDHBTTTTTTTTHDAVH
-WTTKTTTMTTTYW---

Original motif
Consensus sequence: DBTHHAAAAAAAAVHDH



Reverse complement motif
Consensus sequence: DDHBTTTTTTTTHDAVH

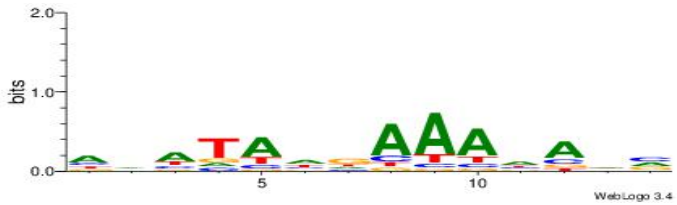


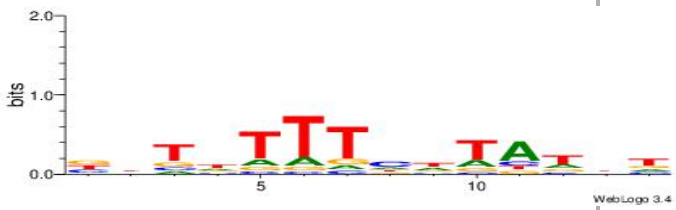
Motif ID:	UP00097
Motif name:	Mtf1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	13
Similarity score:	0.0267248

Alignment:
VDTHTTTHHTATDH
WTTKTTTMTTTYW-

Original motif
Consensus sequence: HDATAHDAAAHADV

Reverse complement motif
Consensus sequence: VDTHTTTHHTATDH

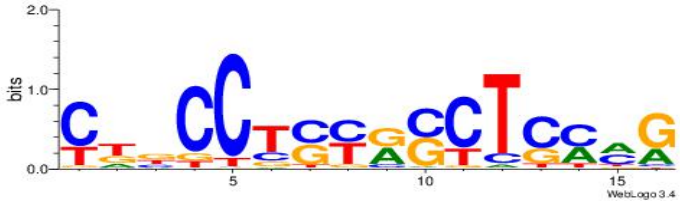




Dataset #: 1 **Motif ID: 83** **Motif name: C083**

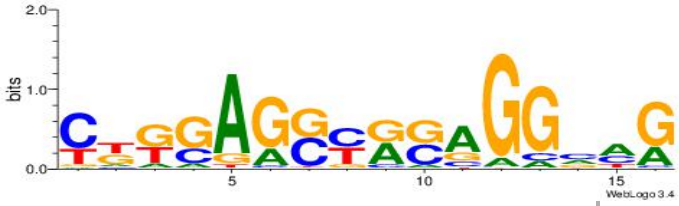
Original motif

Consensus sequence: CKBCCTSYRSCTCMMG



Reverse complement motif

Consensus sequence: CYRGAGSMKSAGGBRG



Best Matches for Motif ID 83 (Highest to Lowest)

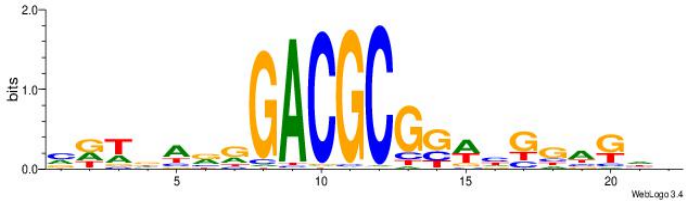
Motif ID:	UP00527
Motif name:	Foxn4_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	16
Similarity score:	0.0269608

Alignment:

VHYTCCDWCCGCGTCMMTHWHV
--CKBCCTSYRSCTCMMG----

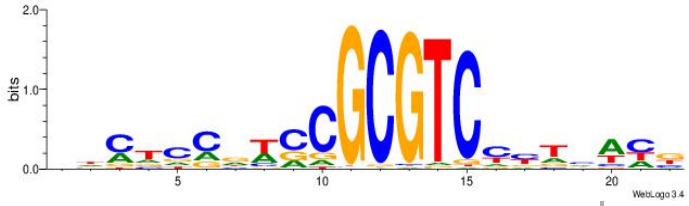
Original motif

Consensus sequence: VDWDARRGACGCGGWHGGAKHV



Reverse complement motif

Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV



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:	1
Number of overlap:	16
Similarity score:	0.0336468

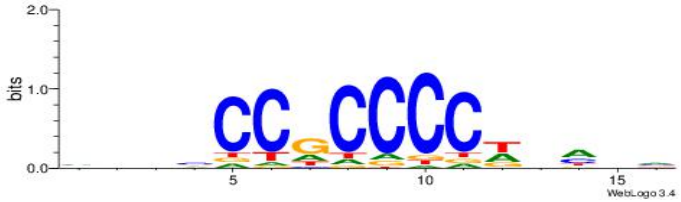
Alignment:
HBBBCCGCCCCWHHHV
CKBCCTSYRSCTCMMG

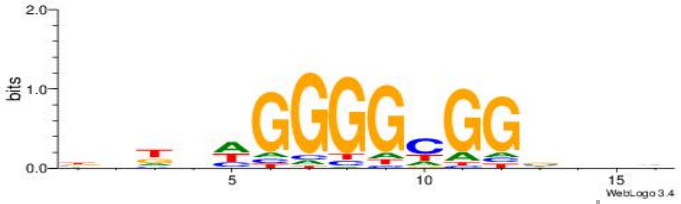
Original motif

Consensus sequence: HBBBCCGCCCCWHHHV

Reverse complement motif

Consensus sequence: BHHHWGGGGCGGBBVH





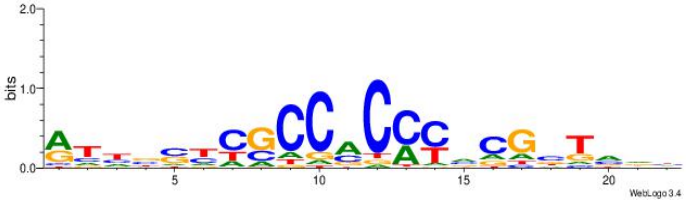
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	16
Similarity score:	0.0351892

Alignment:

```
RTHBSYCGCCMCMYVCGBTVDH
-CKBCCTSYRSCTCMMG-----
```

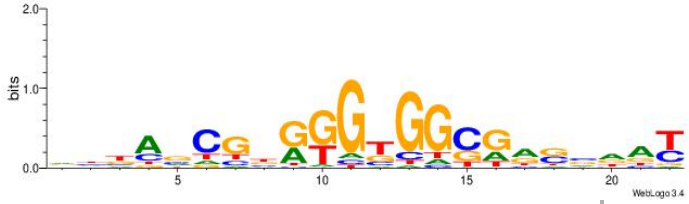
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



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:	1
Number of overlap:	16
Similarity score:	0.035551

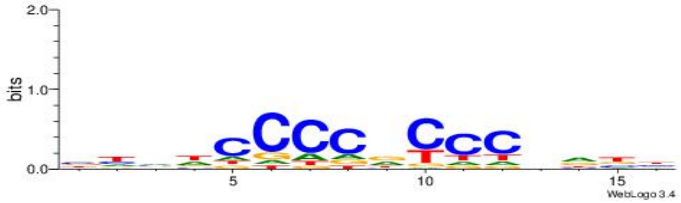
Alignment:

HVDVGGGHGGGGDBHB

CYRGAGSMKSAGGBRG

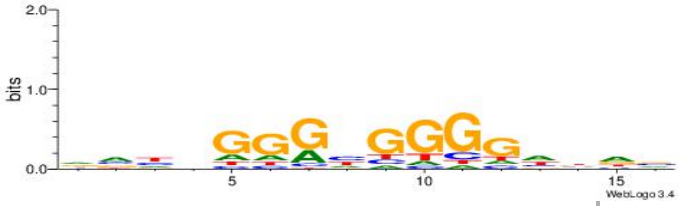
Original motif

Consensus sequence: BHVDCCCCDCCCBDBH



Reverse complement motif

Consensus sequence: HVDVGGGHGGGGDBHB



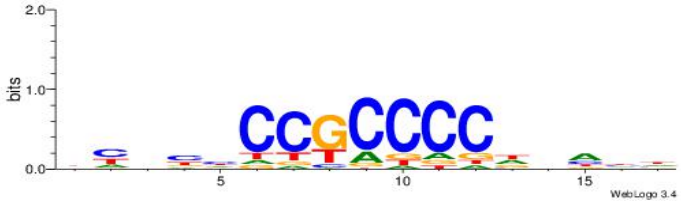
Motif ID:	UP00033
Motif name:	Zfp410_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	16
Similarity score:	0.035682

Alignment:

BHHBHCCGCCCCDHHHH
-CKBCCTSYRSCTCMMG

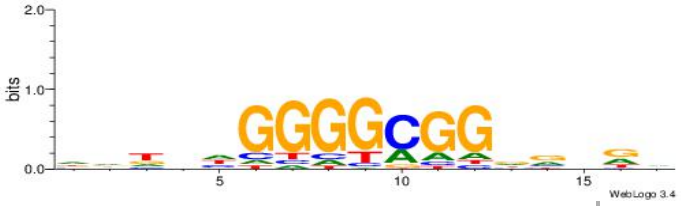
Original motif

Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif

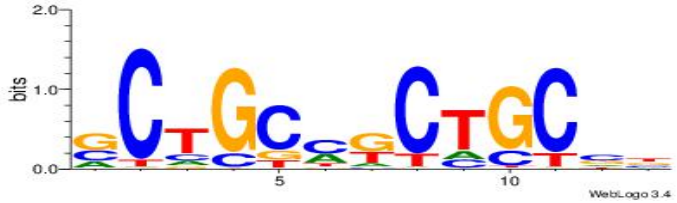
Consensus sequence: HHHHDGGGGCGGDBHDV



Dataset #: 1 Motif ID: 84 Motif name: C084

Original motif

Consensus sequence: SCTGCMKCTGCVB



Reverse complement motif

Consensus sequence: VVGCAGYRGCAGS

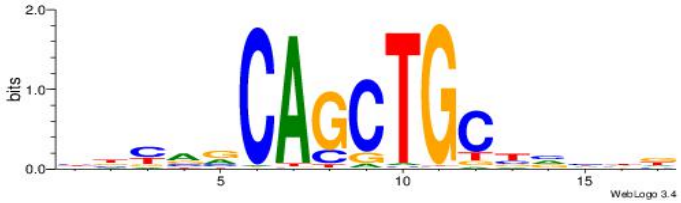
Best Matches for Motif ID 84 (Highest to Lowest)

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

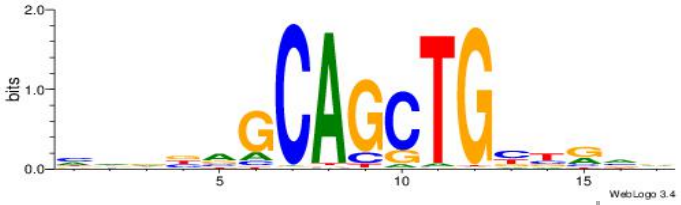
Number of overlap: 13
Similarity score: 0.0229768

Alignment:
HHDVVGCAGCTGVBKVB
---VVGCAGYRGCAGS-

Original motif
Consensus sequence: BBYVVCAGCTGCBVHHD



Reverse complement motif
Consensus sequence: HHDVVGCAGCTGVBKVB



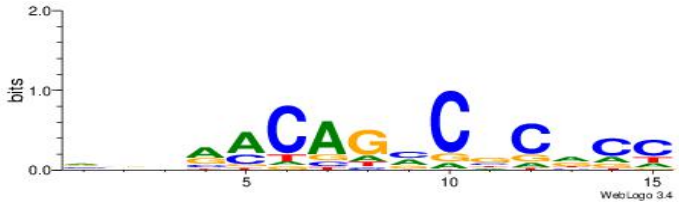
Motif ID: UP00036
Motif name: Myf6_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 1
Number of overlap: 13
Similarity score: 0.0256725

Alignment:
GGDGBGVCTGTKVVB
SCTGCMKCTGCVB--

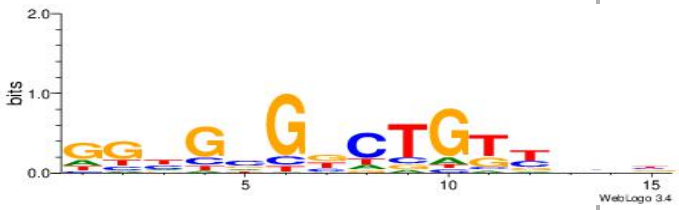
Original motif

Reverse complement motif

Consensus sequence: VVVRACAGVCBCDCC



Consensus sequence: GGDGBGVCTGTKVVB



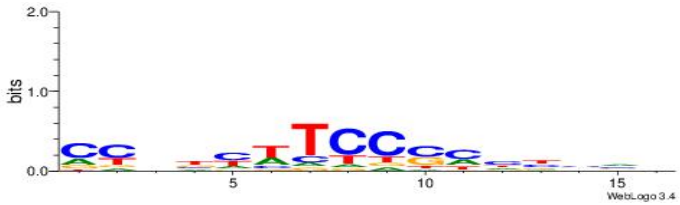
Motif ID:	UP00013
Motif name:	Gabpa_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	13
Similarity score:	0.0310274

Alignment:

```
CYDBYWTCCSMHBVVH
SCTGCMKCTGCVB---
```

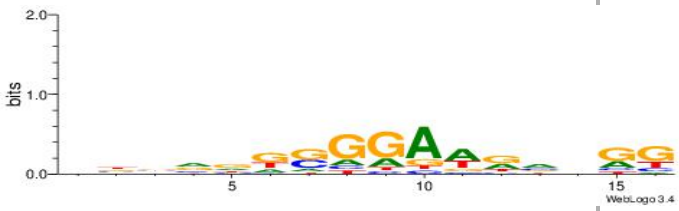
Original motif

Consensus sequence: CYDBYWTCCSMHBVVH



Reverse complement motif

Consensus sequence: DBVVDRSGGAWKVHKG



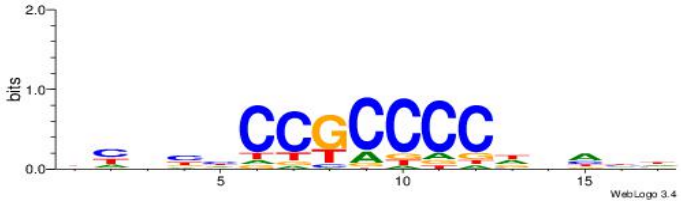
Motif ID:	UP00033
Motif name:	Zfp410_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	13
Similarity score:	0.0325376

Alignment:

```
BHHBHCCGCCCCDHHHH
----SCTGCMKCTGCVB
```

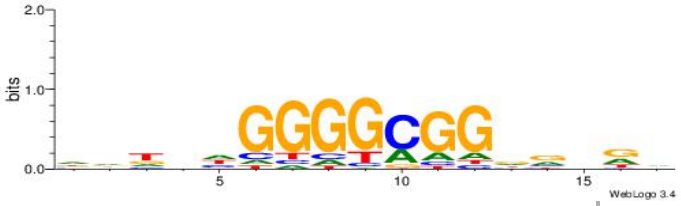
Original motif

Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif

Consensus sequence: HHHHDGGGGCGGDBHDV

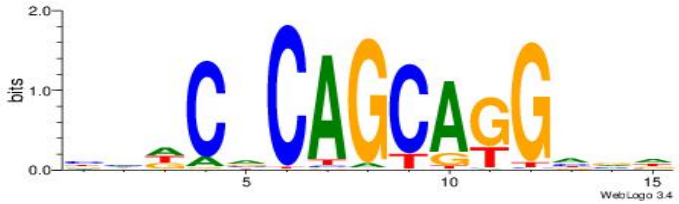


Motif ID:	UP00102
Motif name:	Zic1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	13

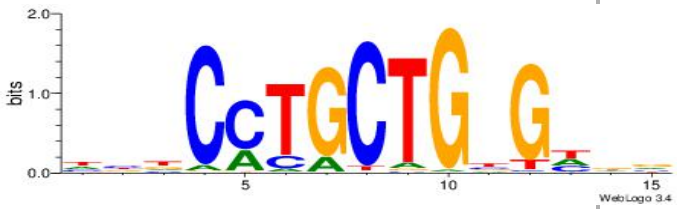
Similarity score: 0.0348713

Alignment:
DVHCCTGCTGBGDDB
--VVGCAGYRGCAGS

Original motif
Consensus sequence: BHDCVCAGCAGGHVD

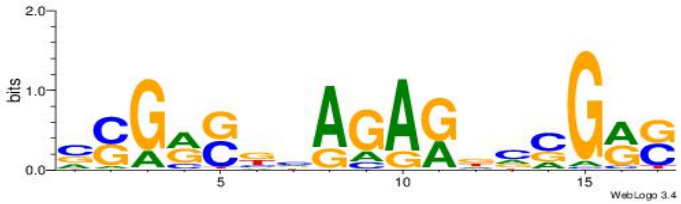


Reverse complement motif
Consensus sequence: DVHCCTGCTGBGDDB

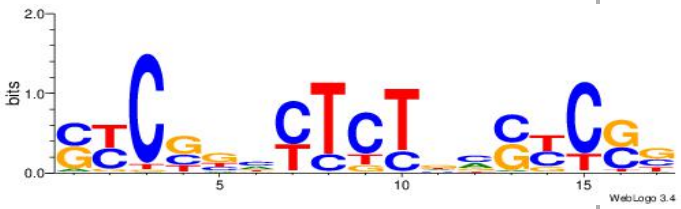


Dataset #: 1 Motif ID: 85 Motif name: C085

Original motif
Consensus sequence: VSGRSBHAGARDVSGRS



Reverse complement motif
Consensus sequence: SKCSVHMTCTDBSKCSV



Best Matches for Motif ID 85 (Highest to Lowest)

Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement

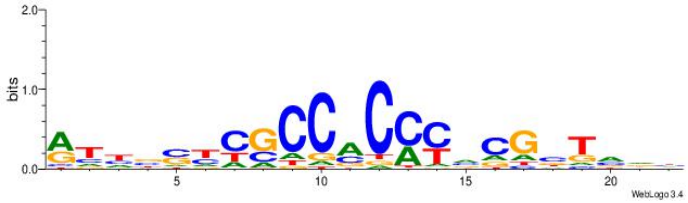
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	17
Similarity score:	0.0345982

Alignment:

```
RTHBSYCGCCMCMYVCGBTVDH
----SKCSVHMTCTDBSKCSV-
```

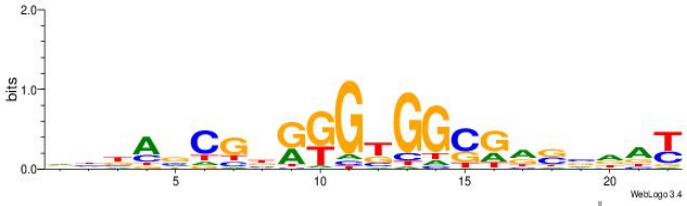
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



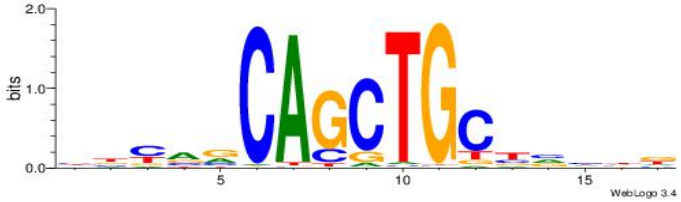
Motif ID:	UP00099
Motif name:	Ascl2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	17
Similarity score:	0.0368478

Alignment:

```
HHDVVGCAGCTGVBKVB
SKCSVHMTCTDBSKCSV
```

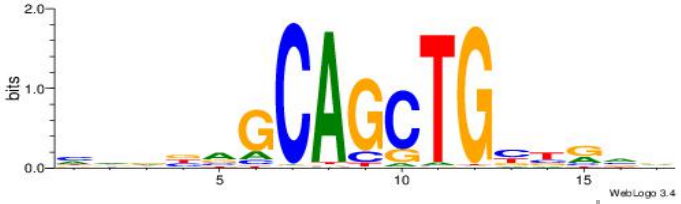
Original motif

Consensus sequence: BBYVVCAGCTGCBVHHD



Reverse complement motif

Consensus sequence: HHDVVGCAGCTGVBKVB



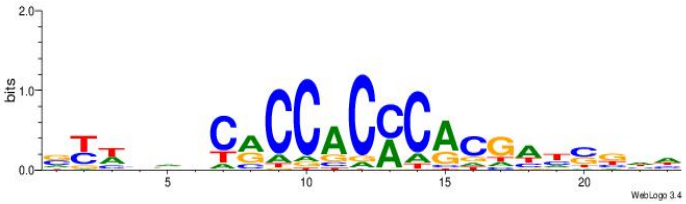
Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	17
Similarity score:	0.0387638

Alignment:

```
VYWVVHCRCCACMCACGAHSBHH
------VSGRSBHAGARDVSGRS
```

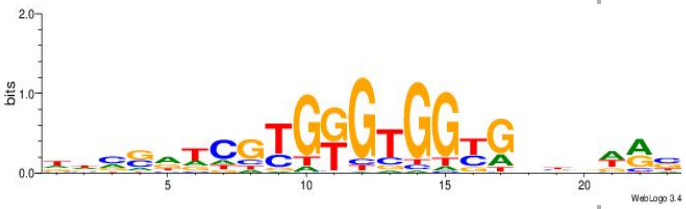
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



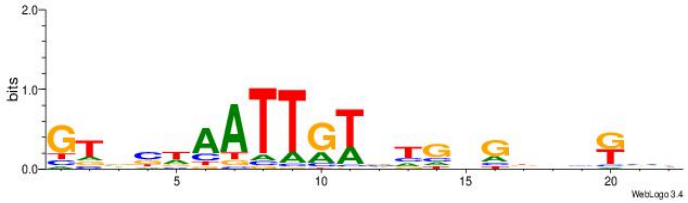
Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	17
Similarity score:	0.0394694

Alignment:

```
GTVBDAATTGTVTGHGDDHKVB
---SKCSVHMTCTDBSKCSV--
```

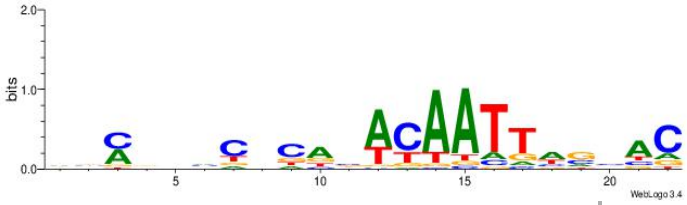
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif

Consensus sequence: VVYDDDCHCAVACAATTDBVAC

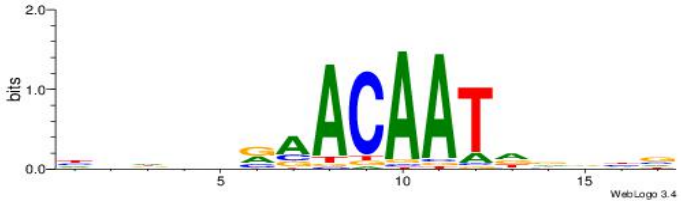


Motif ID:	UP00016
Motif name:	Sry_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1

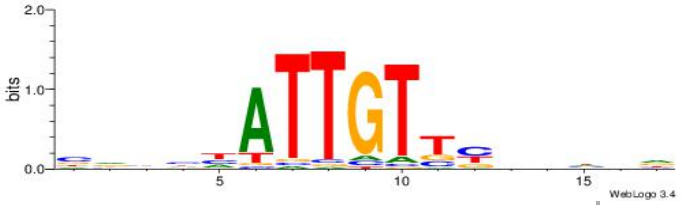
Number of overlap: 17
Similarity score: 0.0403194

Alignment:
HHDHDRAACAATDDVHV
VSGRSBHAGARDVSGRS

Original motif
Consensus sequence: HHDHDRAACAATDDVHV

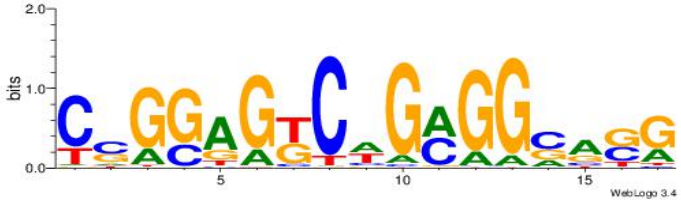


Reverse complement motif
Consensus sequence: VHVHDATTGTTMHDDDH

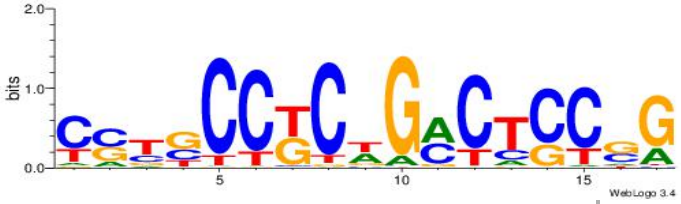


Dataset #: 1 Motif ID: 86 Motif name: C086

Original motif
Consensus sequence: CSGGAGKCWGMGGSASG



Reverse complement motif
Consensus sequence: CSTSCCYCWGRCTCCSG



Best Matches for Motif ID 86 (Highest to Lowest)

Motif ID: UP00540
Motif name: Gli3_v016060_secondary
Species: Mus musculus

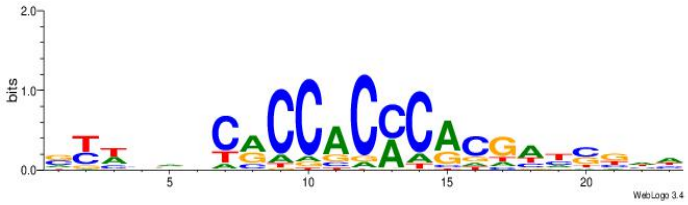
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	17
Similarity score:	0.0432994

Alignment:

```
VYWVVHCRCCACMCACGAHSBHH
----CSTSCCYCWGRCTCCSG--
```

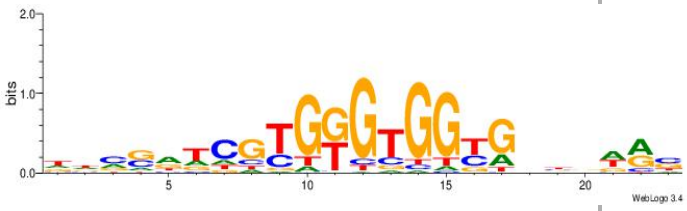
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

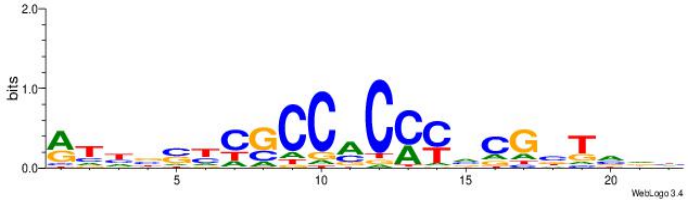
Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



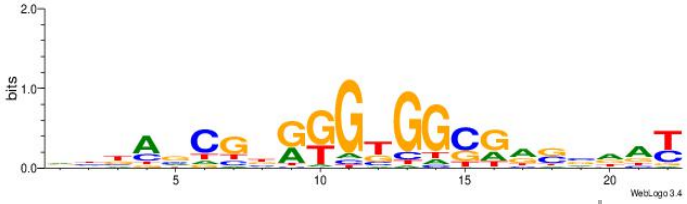
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	17
Similarity score:	0.0456174

Alignment:
HDBABCGBKRGYGGCGMSBHAK
-CSGGAGKCWGMGGSASG----

Original motif
Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif
Consensus sequence: HDBABCGBKRGYGGCGMSBHAK

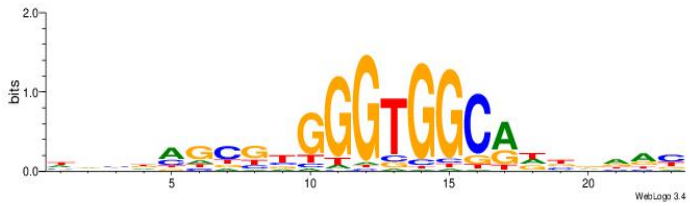


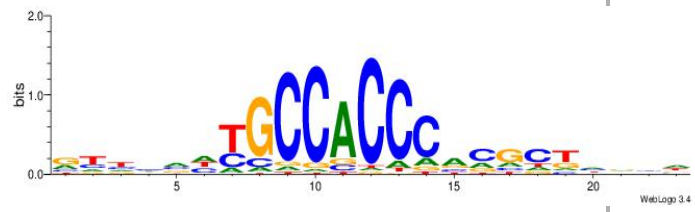
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	17
Similarity score:	0.0460804

Alignment:
BDDHVDKGCCACCCVCGCTDBVH
----CSTSCCYCWGRCTCCSG--

Original motif
Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB

Reverse complement motif
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH





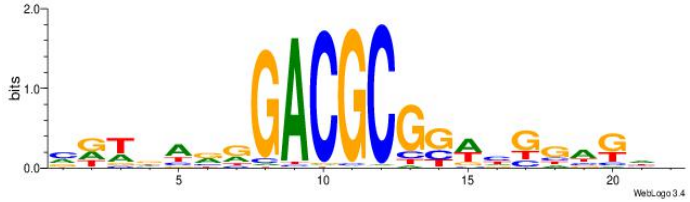
Motif ID:	UP00527
Motif name:	Foxn4_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	17
Similarity score:	0.052654

Alignment:

```
VDWDARRGACGCGGWHGGAKHV
----CSGGAGKCWGMGGSASG-
```

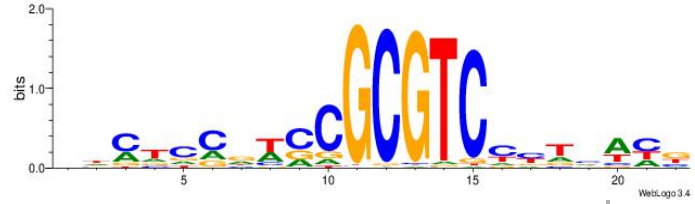
Original motif

Consensus sequence: VDWDARRGACGCGGWHGGAKHV



Reverse complement motif

Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV



Motif ID:	UP00098

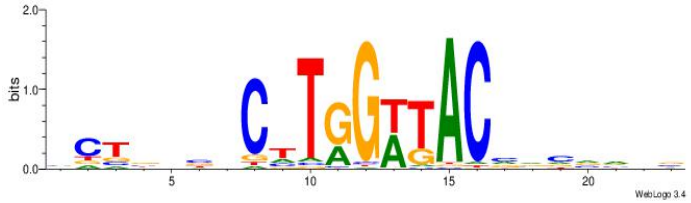
Motif name:	Rfx3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	17
Similarity score:	0.0530373

Alignment:

```
BDBBVBVGTAWCCAAGVBHBAGB
----CSGGAGKCWGMGGSASG--
```

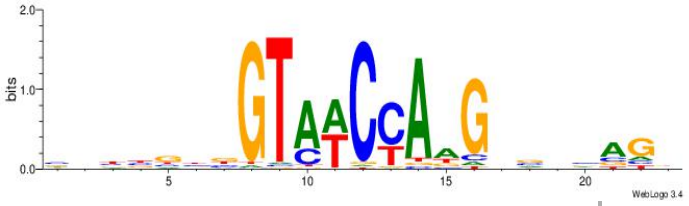
Original motif

Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB



Reverse complement motif

Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB



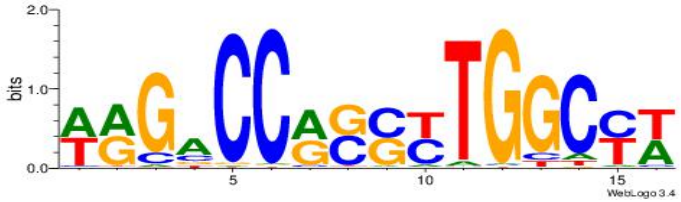
Dataset #: 1 Motif ID: 87 Motif name: C087

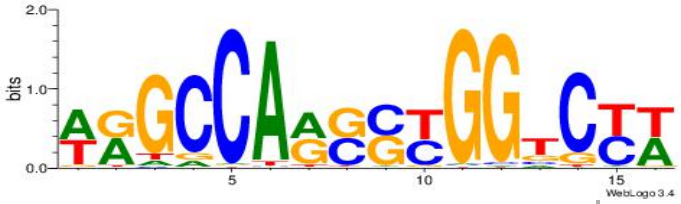
Original motif

Consensus sequence: WRGACCRSSYTGGCYW

Reverse complement motif

Consensus sequence: WKGCCAMSSKGGTCKW





Best Matches for Motif ID 87 (Highest to Lowest)

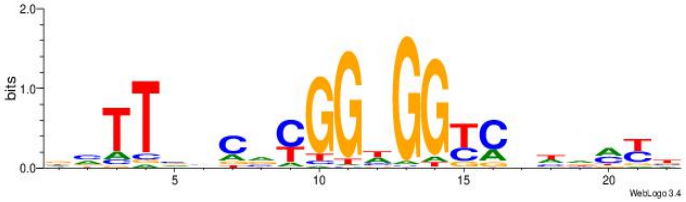
Motif ID:	UP00540
Motif name:	Gli3_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	16
Similarity score:	0.0240508

Alignment:

```
DVTTVVCVYGGHGGYCHHDMYB
--WKGCCAMSSKGGTCKW----
```

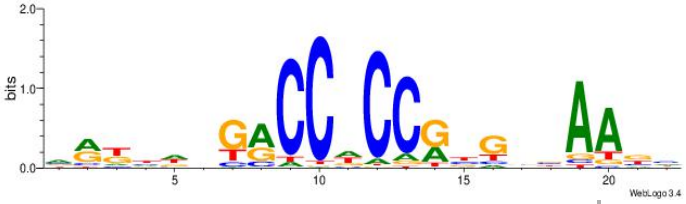
Original motif

Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



Reverse complement motif

Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH



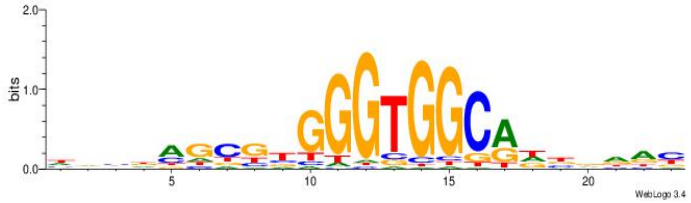
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	16
Similarity score:	0.0273083

Alignment:

```
BDDHVDKGCCACCCVCGCTDBVH
-----WKGCCAMSSKGGTCKW--
```

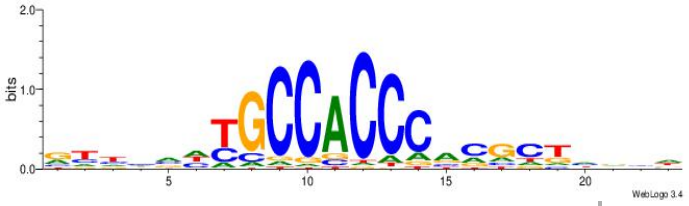
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH

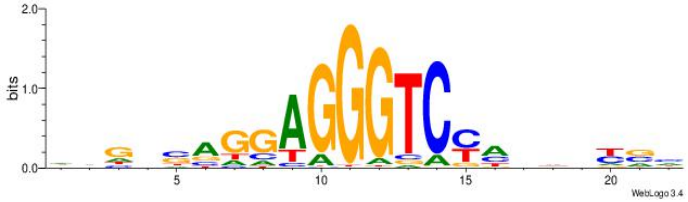


Motif ID:	UP00539
Motif name:	Gli2_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	16

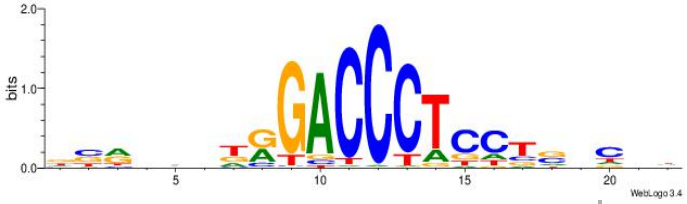
Similarity score: 0.0299939

Alignment:
HVGVSAGGAGGGTCYHHHHYVH
------WRGACCRSSYTGGCYW

Original motif
Consensus sequence: HVGVSAGGAGGGTCYHHHHYVH



Reverse complement motif
Consensus sequence: DVMHHDHKGACCCTCCTSVCBH

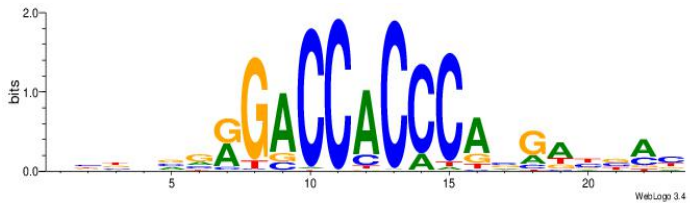


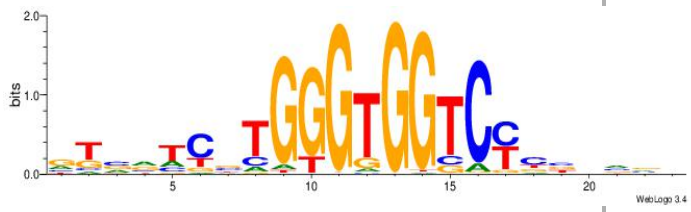
Motif ID: UP00538
Motif name: Gli1_v015681_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 6
Number of overlap: 16
Similarity score: 0.0316295

Alignment:
BBBDVVRGACCACCCAVGABBAB
-----WRGACCRSSYTGGCYW--

Original motif
Consensus sequence: BBBDVVRGACCACCCAVGABBAB

Reverse complement motif
Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB





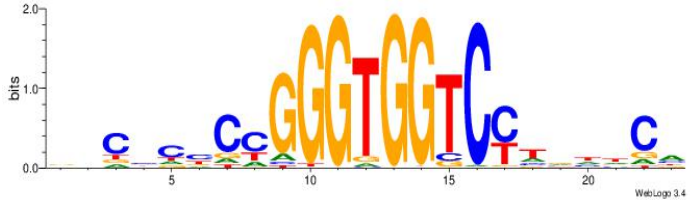
Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	16
Similarity score:	0.031888

Alignment:

```
HGDHVHKGACCACCCGGBGBGDB
-----WRGACCRSSYTGGCYW--
```

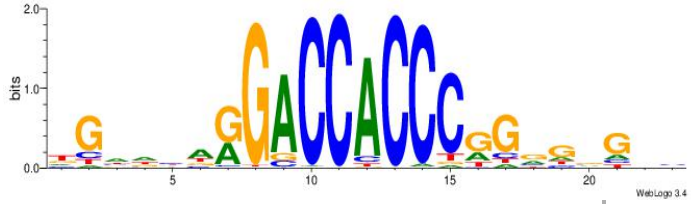
Original motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif

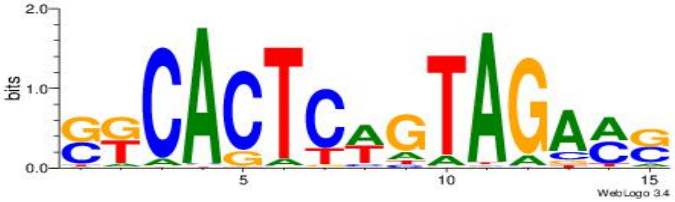
Consensus sequence: HGDHVHKGACCACCCGGBGBGDB



Dataset #: 1 Motif ID: 88 Motif name: C088

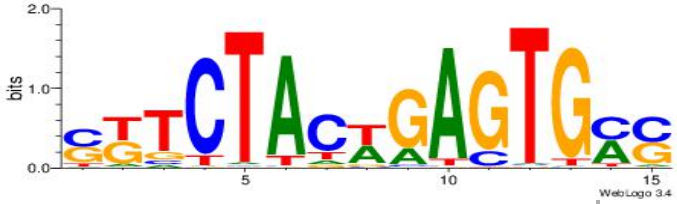
Original motif

Consensus sequence: SKCACTCWGTAGAMS



Reverse complement motif

Consensus sequence: SYTCTACWGAGTGYS



Best Matches for Motif ID 88 (Highest to Lowest)

Motif ID:	UP00201
Motif name:	Emx2
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:	0.028571

Alignment:

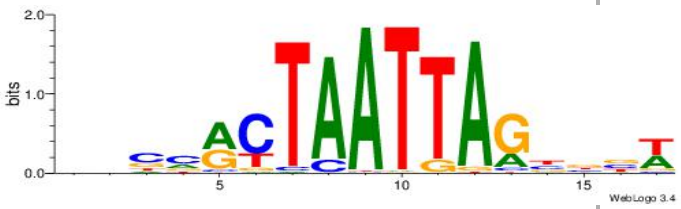
```
WVVVCTAATTAGYBGHB
-SYTCTACWGAGTGYS-
```

Original motif

Consensus sequence: WVVVCTAATTAGYBGHB

Reverse complement motif

Consensus sequence: BHCBMCTAATTAGBVVW



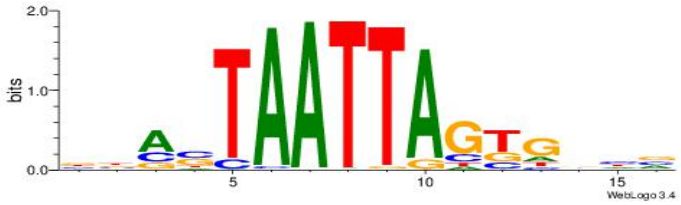
Motif ID:	UP00123
Motif name:	Hlxb9
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	15
Similarity score:	0.0306813

Alignment:

```
BBASTAATTAGTGVHV
SYTCTACWGAGTGYS-
```

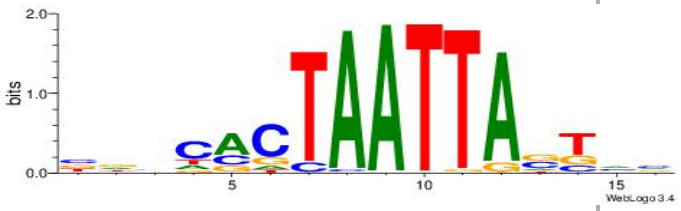
Original motif

Consensus sequence: BBASTAATTAGTGVHV



Reverse complement motif

Consensus sequence: VDVCACTAATTASTVB



Motif ID:	UP00162

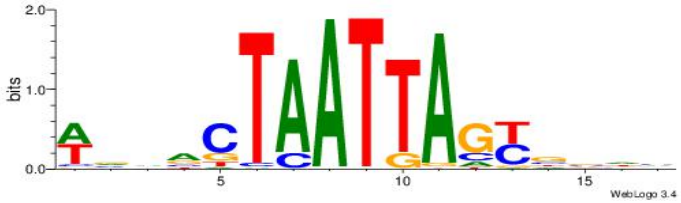
Motif name:	Evx1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	15
Similarity score:	0.0319373

Alignment:

```
WVHVCTAATTAGYBVDV
-SYTCTACWGAGTGYS-
```

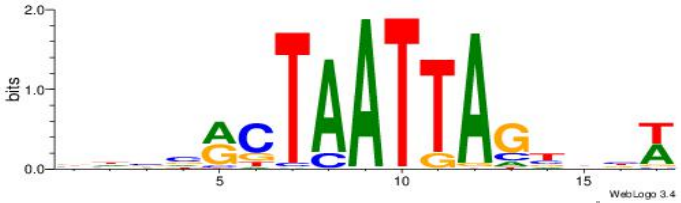
Original motif

Consensus sequence: WVHVCTAATTAGYBVDV



Reverse complement motif

Consensus sequence: VDVBMCTAATTAGBHVW

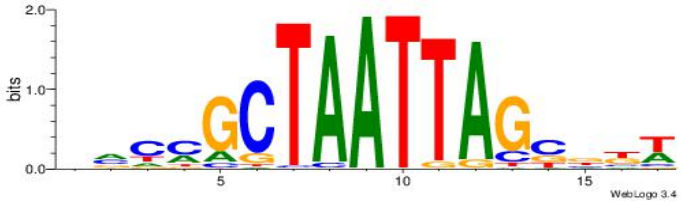


Motif ID:	UP00132
Motif name:	Evx2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	15

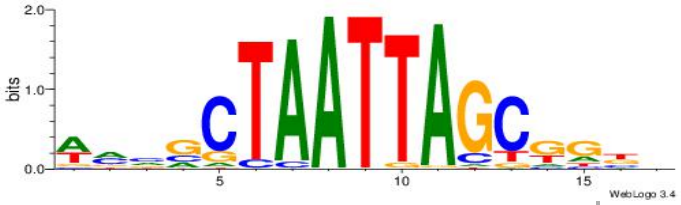
Similarity score: 0.0320303

Alignment:
WRBGCTAATTAGCRGBB
-SYTCTACWGAGTGYS-

Original motif
Consensus sequence: BVCMGCTAATTAGCBKW



Reverse complement motif
Consensus sequence: WRBGCTAATTAGCRGBB

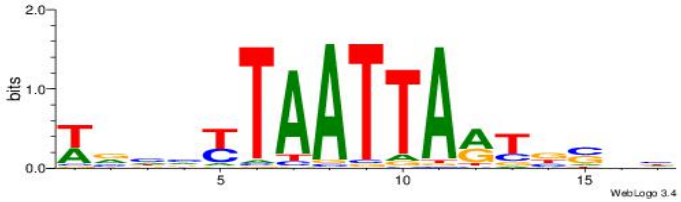


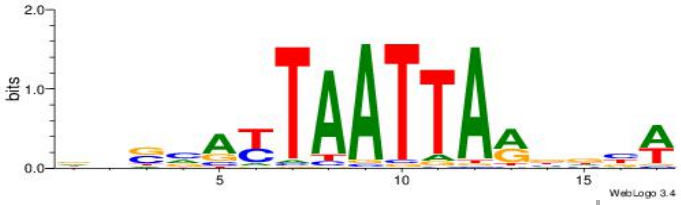
Motif ID: UP00116
Motif name: Rhox6
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 2
Number of overlap: 15
Similarity score: 0.0322217

Alignment:
WVHVYTAATTARTBSDH
-SYTCTACWGAGTGYS-

Original motif
Consensus sequence: WVHVYTAATTARTBSDH

Reverse complement motif
Consensus sequence: DDSBAKTAATTAMVDVW

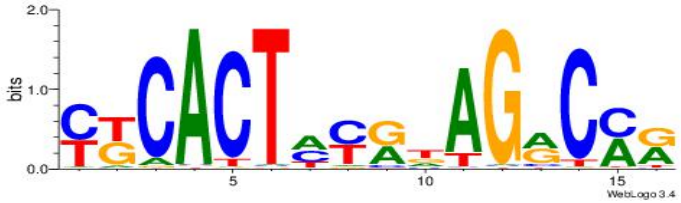




Dataset #: 1 **Motif ID: 89** **Motif name: C089**

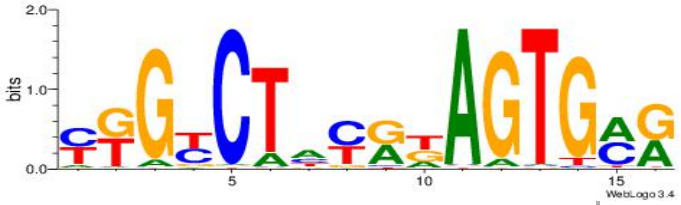
Original motif

Consensus sequence: YKCACTMYRDAGRCMR



Reverse complement motif

Consensus sequence: MRGKCTDMKYAGTGRK



Best Matches for Motif ID 89 (Highest to Lowest)

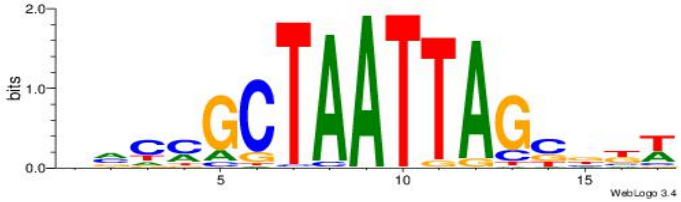
Motif ID:	UP00132
Motif name:	Evx2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	16
Similarity score:	0.0412748

Alignment:

```
WRBGCTAATTAGCRGBB
MRGKCTDMKYAGTGRK-
```

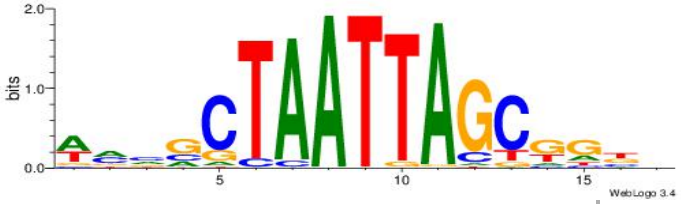
Original motif

Consensus sequence: BVCMGCTAATTAGCBKW



Reverse complement motif

Consensus sequence: WRBGCTAATTAGCRGBB



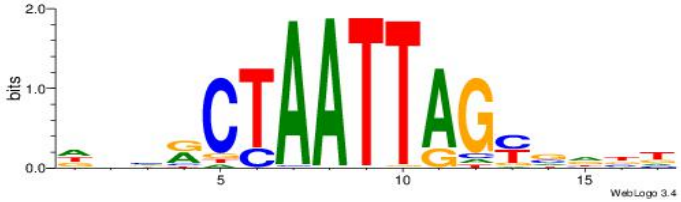
Motif ID:	UP00131
Motif name:	Gbx2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	16
Similarity score:	0.0424502

Alignment:

```
DVDVKCTAATTAGMVVD
-MRGKCTDMKYAGTGRK
```

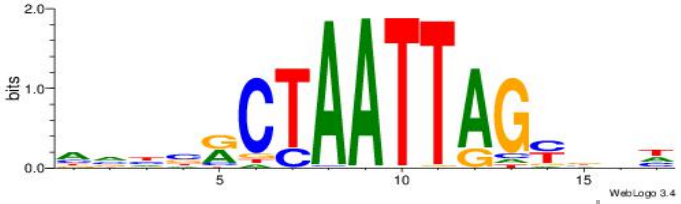
Original motif

Consensus sequence: DVVRCTAATTAGYVDBD



Reverse complement motif

Consensus sequence: DVDVKCTAATTAGMVVD



Motif ID:	UP00201
Motif name:	Emx2
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:	0.0439615

Alignment:

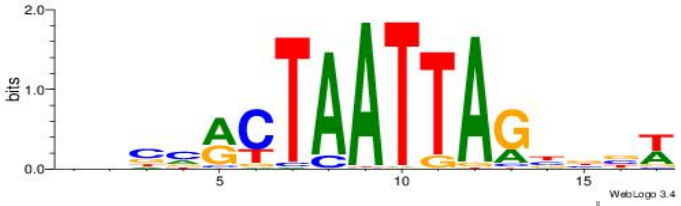
```
WVVVCTAATTAGYBGHB
MRGKCTDMKYAGTGRK-
```

Original motif

Consensus sequence: WVVVCTAATTAGYBGHB

Reverse complement motif

Consensus sequence: BHCBMCTAATTAGBVVW

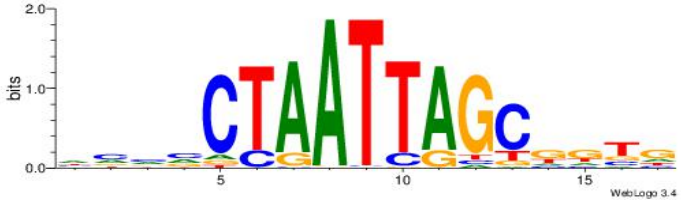


Motif ID:	UP00184
Motif name:	Lhx8
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1

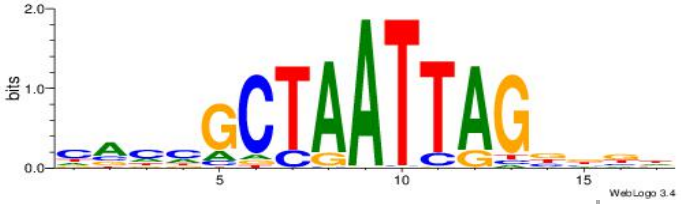
Number of overlap: 16
Similarity score: 0.0454659

Alignment:
CAHHGCTAATTAGVVVH
MRGKCTDMKYAGTGRK-

Original motif
Consensus sequence: HVVVCTAATTAGCDDTG



Reverse complement motif
Consensus sequence: CAHHGCTAATTAGVVVH

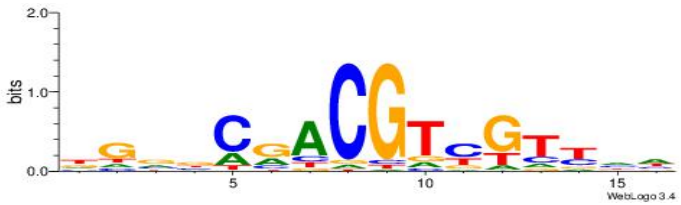


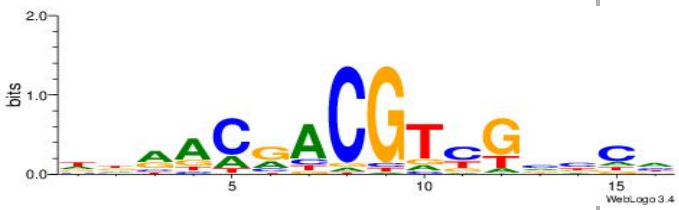
Motif ID: UP00084
Motif name: Gmeb1_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 1
Number of overlap: 16
Similarity score: 0.0461544

Alignment:
DGVBCRACGTYGTYHH
YKCACTMYRDAGRCMR

Original motif
Consensus sequence: DGVBCRACGTYGTYHH

Reverse complement motif
Consensus sequence: HHMACKACGTMGBVCD

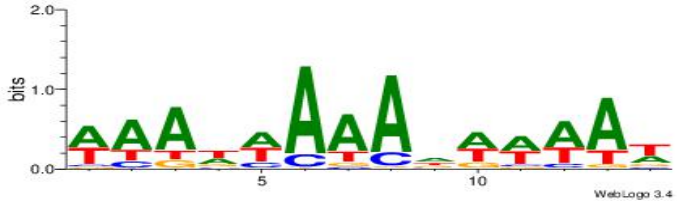




Dataset #: 1 **Motif ID: 90** **Motif name: C090**

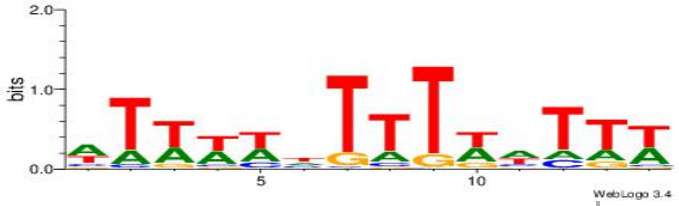
Original motif

Consensus sequence: WAAWWAAADWWWAW



Reverse complement motif

Consensus sequence: WTWWWDTTTWWTTW



Best Matches for Motif ID 90 (Highest to Lowest)

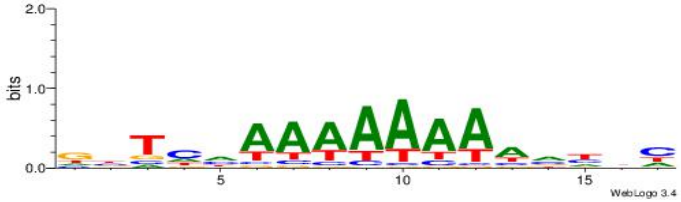
Motif ID:	UP00090
Motif name:	Elf3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0393475

Alignment:

```
DDHBTTTTTTTTHDAVH
WTWWWDTTTWWTTW---
```

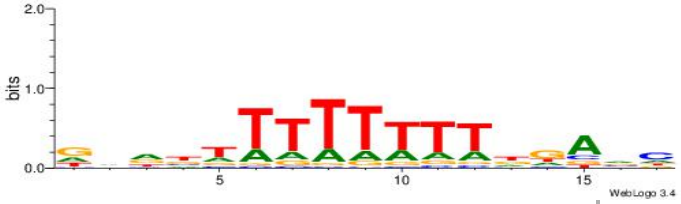
Original motif

Consensus sequence: DBTHHAAAAAAAAVHDH



Reverse complement motif

Consensus sequence: DDHBTTTTTTTTHDAVH



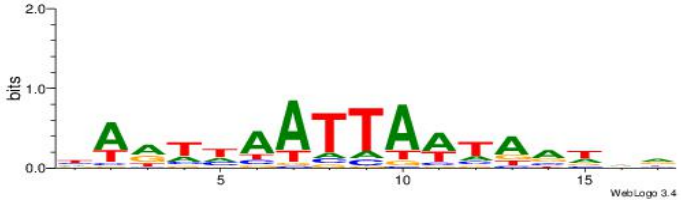
Motif ID:	UP00255
Motif name:	Dbx1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0396489

Alignment:

```
DHDBTAWTAATTHAKTH
---WTWWWDTTTWWTTW
```

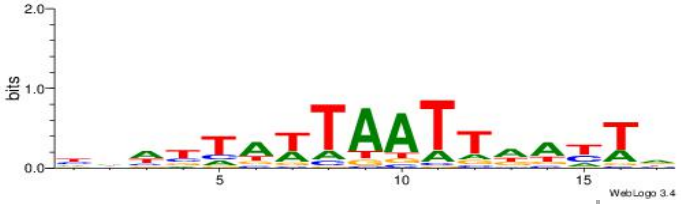
Original motif

Consensus sequence: HARTHAATTAWTAVDHD



Reverse complement motif

Consensus sequence: DHDBTAWTAATTHAKTH



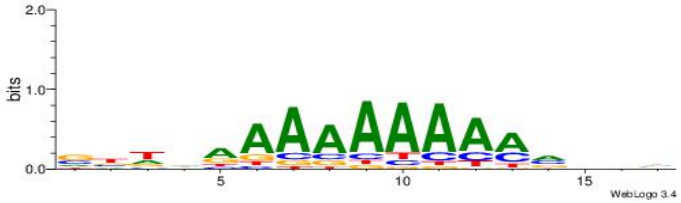
Motif ID:	UP00077
Motif name:	Srf_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0396638

Alignment:

```
VBDDAAAAAAAAMVBHH
---WAAWWAAADWWWAW
```

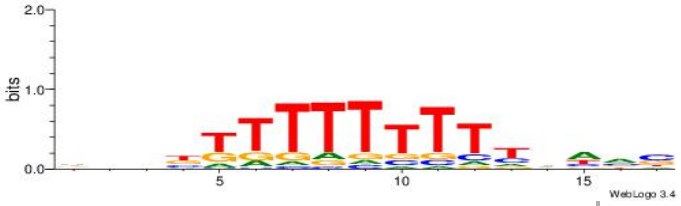
Original motif

Consensus sequence: VBDDAAAAAAAAMVBHH



Reverse complement motif

Consensus sequence: HHVBYTTTTTTTTDDVV

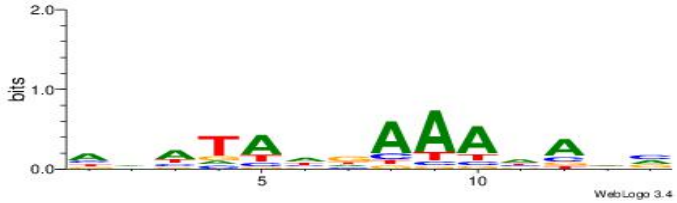


Motif ID:	UP00097
Motif name:	Mtf1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward

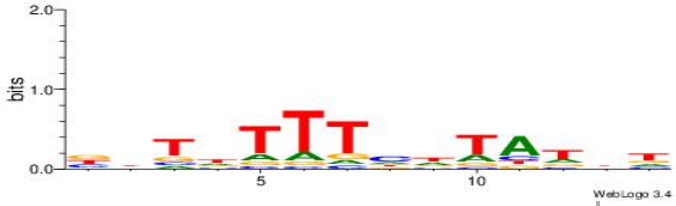
Position number:	1
Number of overlap:	14
Similarity score:	0.0432915

Alignment:
VDTHTTTHHTATDH
WTWWWDTTTWWTTW

Original motif
Consensus sequence: HDATAHDAAAHADV



Reverse complement motif
Consensus sequence: VDTHTTTHHTATDH

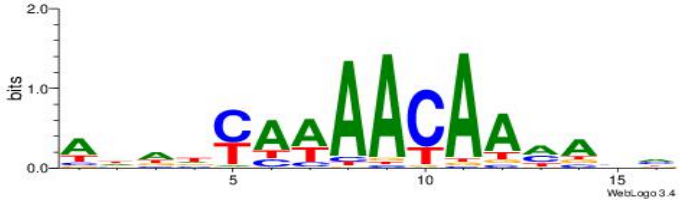


Motif ID:	UP00061
Motif name:	Foxl1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	14
Similarity score:	0.0464108

Alignment:
HDTYTTGTTWTKDDDT
-WTWWWDTTTWWTTW-

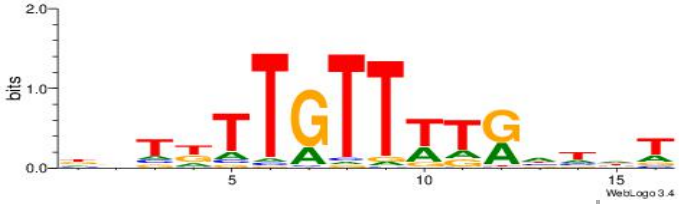
Original motif

Consensus sequence: ADDDYAWAACAAMAHH



Reverse complement motif

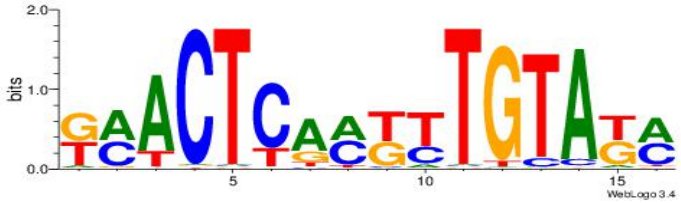
Consensus sequence: HDTYTTGTTWTKDDDT



Dataset #: 1 Motif ID: 91 Motif name: C091

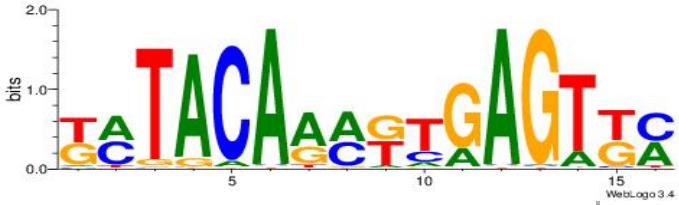
Original motif

Consensus sequence: KMACTCAMKYTGTAKM



Reverse complement motif

Consensus sequence: YRTACAMRYTGAGTYY

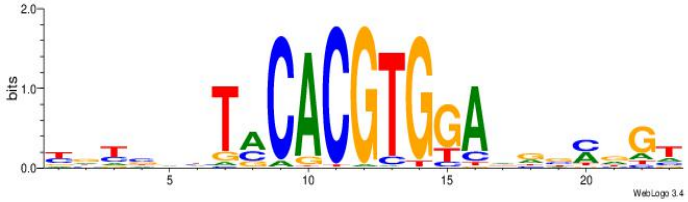


Best Matches for Motif ID 91 (Highest to Lowest)

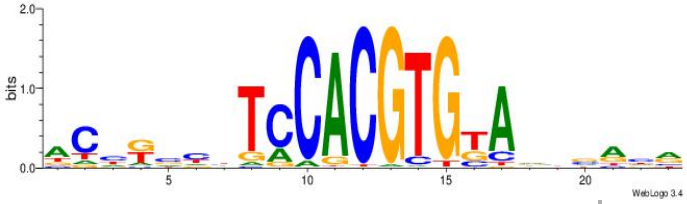
Motif ID:	UP00050
Motif name:	Bhlhb2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	16
Similarity score:	0.0271799

Alignment:
YDYBDHTMCACGTGGADDBMDGT
----YRTACAMRYTGAGTYY---

Original motif
Consensus sequence: YDYBDHTMCACGTGGADDBMDGT



Reverse complement motif
Consensus sequence: ACHRBHDTCCACGTGYAHHBMHM

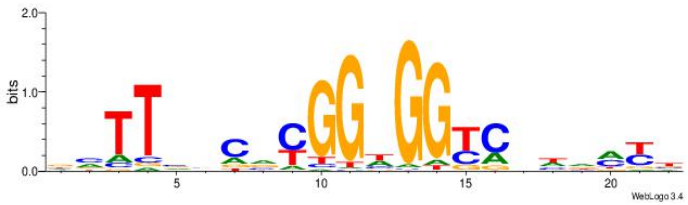


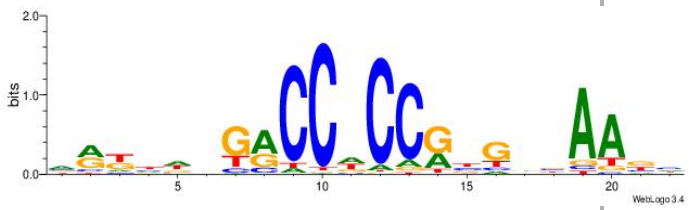
Motif ID:	UP00540
Motif name:	Gli3_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	16
Similarity score:	0.0333934

Alignment:
VMYDHDGMCCHCCKBGVVAAVH
YRTACAMRYTGAGTYY------

Original motif
Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB

Reverse complement motif
Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH





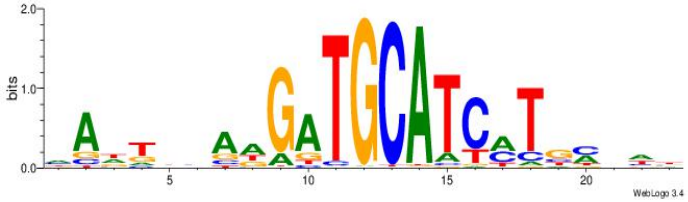
Motif ID:	UP00528
Motif name:	Foxm1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	16
Similarity score:	0.0347276

Alignment:

```
HADTBVADGATGCATCMTGMVHB
KMACTCAMKYTGTAKM-------
```

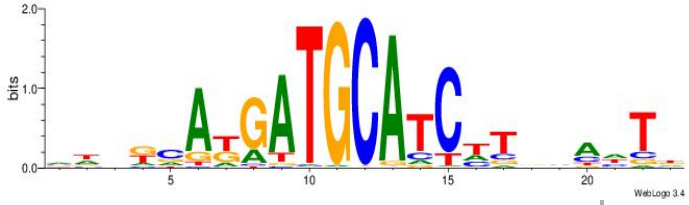
Original motif

Consensus sequence: HADTBVADGATGCATCMTGMVHB



Reverse complement motif

Consensus sequence: VHVRCAYGATGCATCDTVVADTH



Motif ID:	UP00034
Motif name:	Sox7_secondary

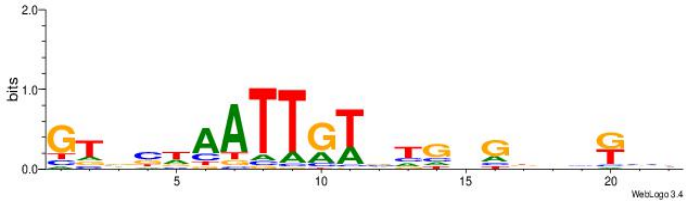
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	16
Similarity score:	0.0370054

Alignment:

```
VVYDDDCHCAVACAATTDBVAC
--YRTACAMRYTGAGTYY----
```

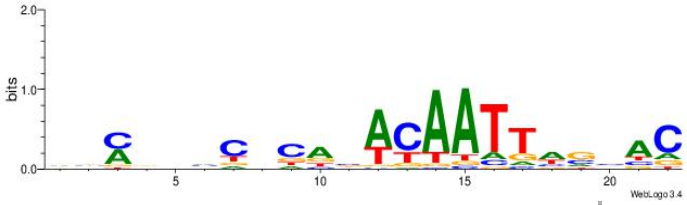
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif

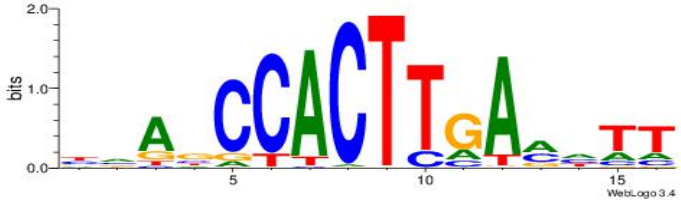
Consensus sequence: VVYDDDCHCAVACAATTDBVAC



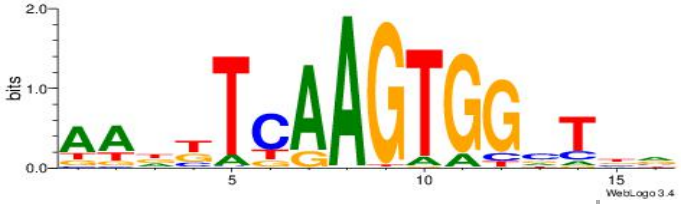
Motif ID:	UP00165
Motif name:	Titf1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	16
Similarity score:	0.0386898

Alignment:
BVABCCACTTGAMHTT
KMACTCAMKYTGTAKM

Original motif
Consensus sequence: BVABCCACTTGAMHTT

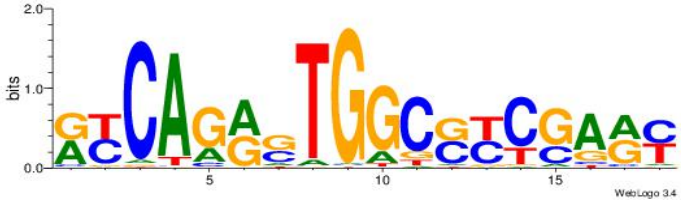


Reverse complement motif
Consensus sequence: AAHYTCAAGTGGBTBV

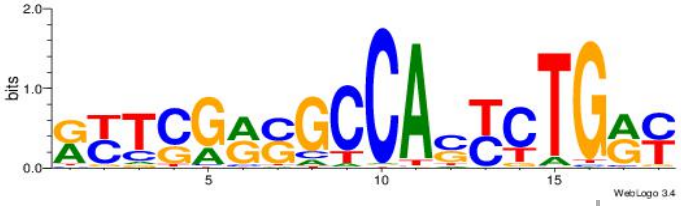


Dataset #: 1 Motif ID: 92 Motif name: C092

Original motif
Consensus sequence: RYCAGRSTGGCSYCGARY



Reverse complement motif
Consensus sequence: KKTCGMSGCCASKCTGMM



Best Matches for Motif ID 92 (Highest to Lowest)

Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif

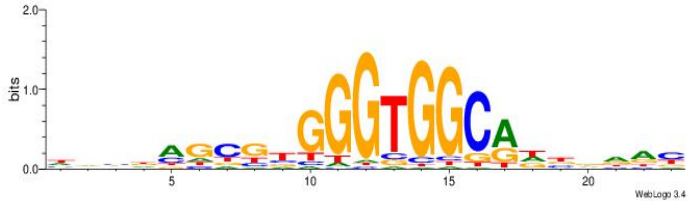
Direction:	Backward
Position number:	1
Number of overlap:	18
Similarity score:	0.0336539

Alignment:

```
HVBDAGCGBGGGTGGCRDBDDDB
-----RYCAGRSTGGCSYCGARY
```

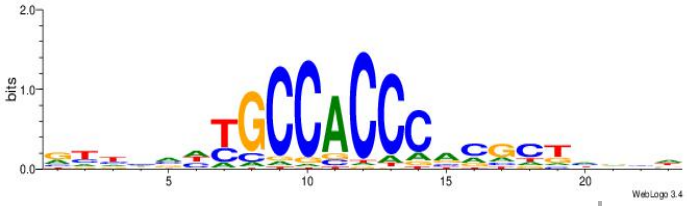
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



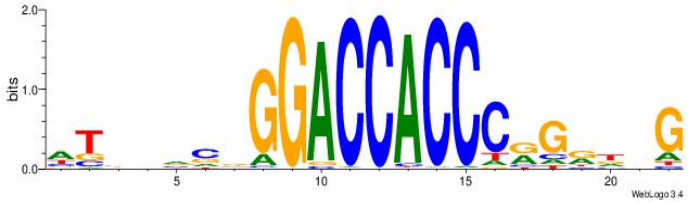
Motif ID:	UP00539
Motif name:	Gli2_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	18
Similarity score:	0.0406327

Alignment:

CBDMCMGGGTGGTCCHVBVBAH
--RYCAGRSTGGCSYCGARY--

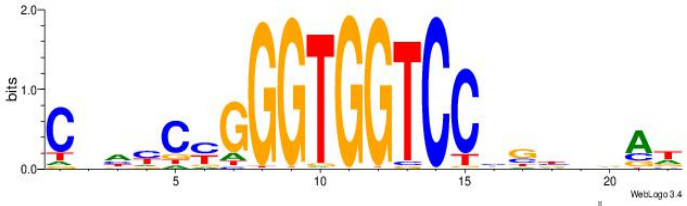
Original motif

Consensus sequence: HTBVVVDGGACCACCCRGRDBG



Reverse complement motif

Consensus sequence: CBDMCMGGGTGGTCCHVBVBAH



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:	5
Number of overlap:	18
Similarity score:	0.0436535

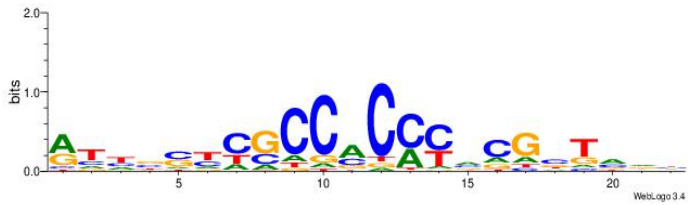
Alignment:
HDBABCGBKRGYGGCGMSBHAK
----RYCAGRSTGGCSYCGARY

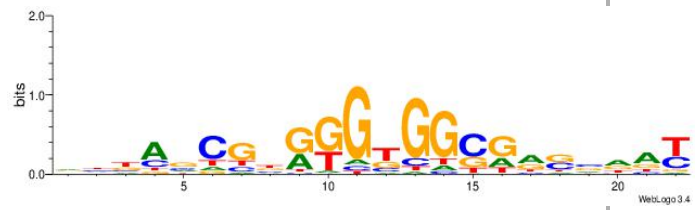
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH

Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK





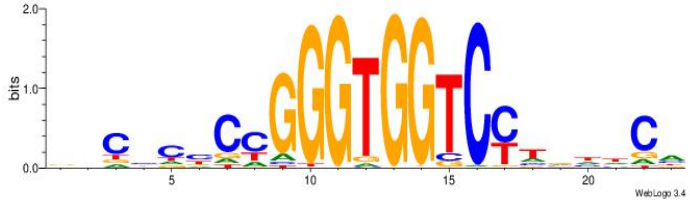
Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	18
Similarity score:	0.0459987

Alignment:

```
BHCBCBCCGGGTGGTCYHVHDCH
----RYCAGRSTGGCSYCGARY-
```

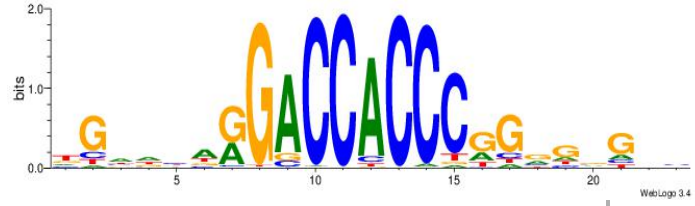
Original motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif

Consensus sequence: HGDHVHKGACCACCCGGBGBGDB



Motif ID: UP00538

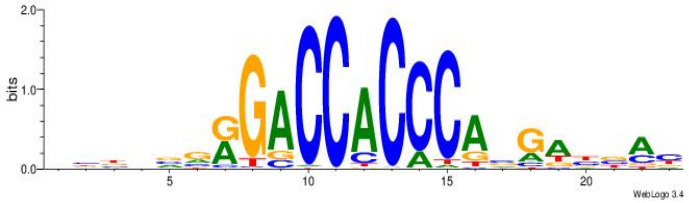
Motif name:	Gli1_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	18
Similarity score:	0.0476871

Alignment:

```
BTBVTCVTGGGTGGTCMVVDVBB
----RYCAGRSTGGCSYCGARY-
```

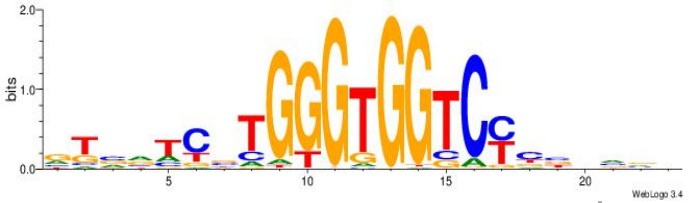
Original motif

Consensus sequence: BBBDVVRGACCACCCAVGABBAB



Reverse complement motif

Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB



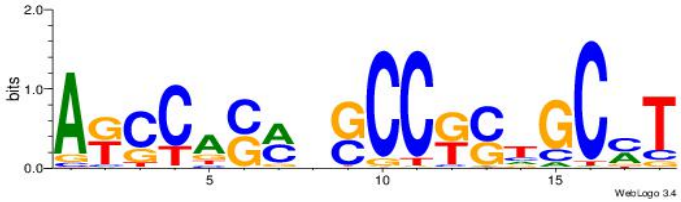
Dataset #: 1 Motif ID: 93 Motif name: C093

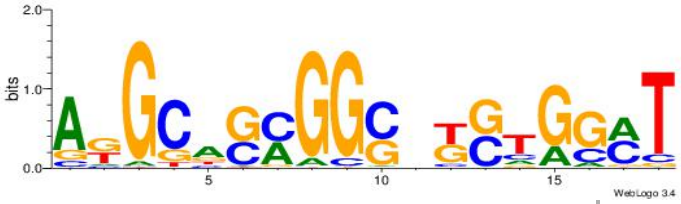
Original motif

Consensus sequence: AKCCASMBSCCKSTGCMT

Reverse complement motif

Consensus sequence: ARGCASYGGSVYSTGGYT





Best Matches for Motif ID 93 (Highest to Lowest)

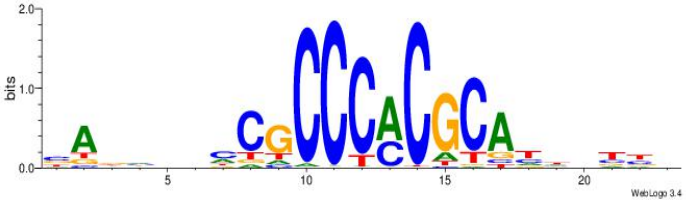
Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	18
Similarity score:	0.0389257

Alignment:

```
BADHBDHCGCCCMCGCAHHDBBV
AKCCASMBSCCKSTGCMT-----
```

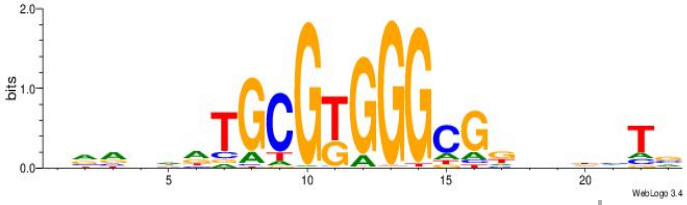
Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif

Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB



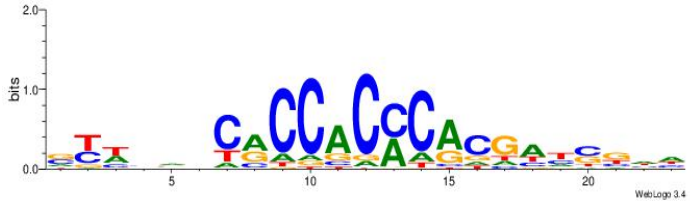
Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	18
Similarity score:	0.0409936

Alignment:

```
VYWVVHCRCCACMCACGAHSBHH
---AKCCASMBSCCKSTGCMT--
```

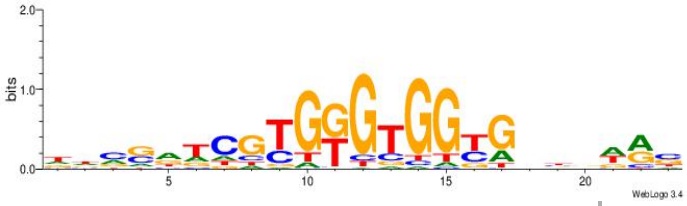
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV

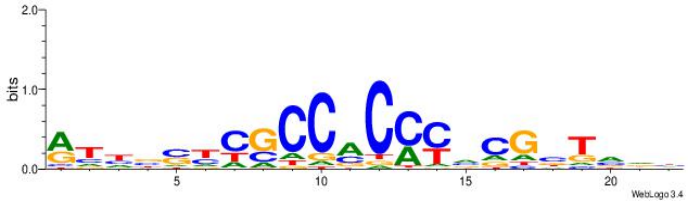


Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3

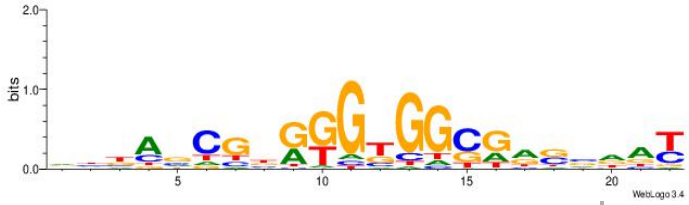
Number of overlap: 18
Similarity score: 0.0442874

Alignment:
RTHBSYCGCCMCMYVCGBTVDH
--AKCCASMBSCCKSTGCMT--

Original motif
Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif
Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



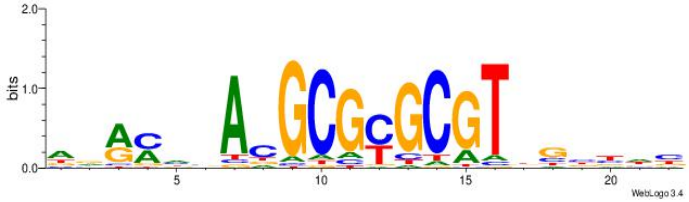
Motif ID: UP00526
Motif name: Foxn1_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 18
Similarity score: 0.0446823

Alignment:
DDRMHBACGCGYGCGTDGBBDB
ARGCASYGGSVYSTGGYT----

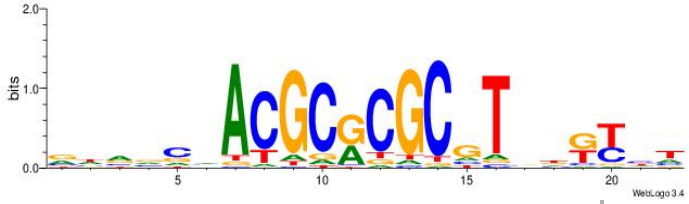
Original motif

Reverse complement motif

Consensus sequence: DDRMHBACGCGYGCGTDGBBDB



Consensus sequence: BDVBCDACGCKCGCGTBHRKHD



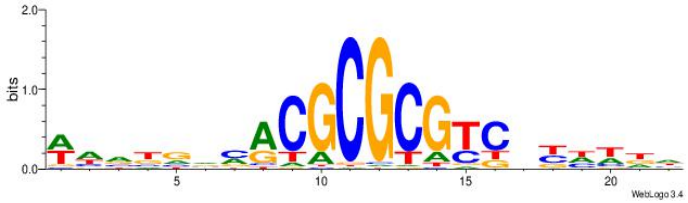
Motif ID:	UP00526
Motif name:	Foxn1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	18
Similarity score:	0.0463423

Alignment:

```
WHVBVVMACGCGCGTCDYHWDH
---ARGCASYGGSVYSTGGYT-
```

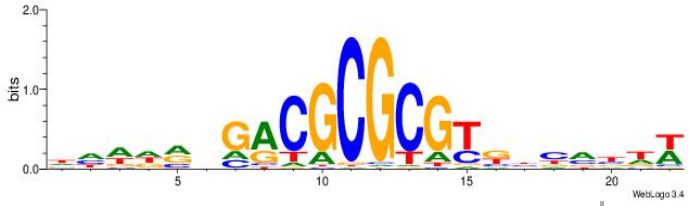
Original motif

Consensus sequence: WHVBVVMACGCGCGTCDYHWDH



Reverse complement motif

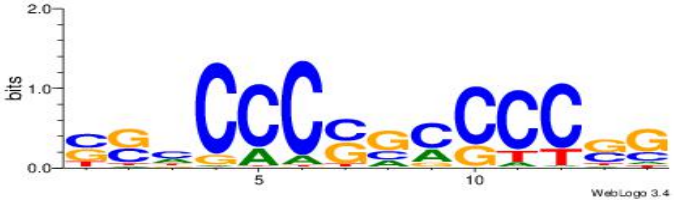
Consensus sequence: HDWHMHGACGCGCGTRBVVBHW



Dataset #: 1 **Motif ID: 94** **Motif name: C094**

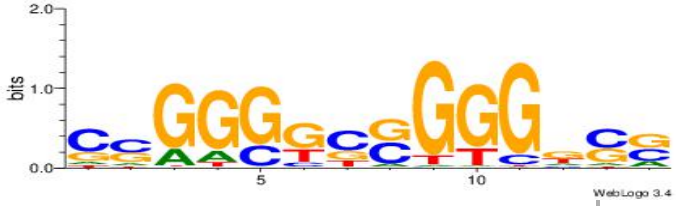
Original motif

Consensus sequence: SSHCCCSGCCCCSG



Reverse complement motif

Consensus sequence: CSGGGGCSGGGDSS



Best Matches for Motif ID 94 (Highest to Lowest)

Motif ID:	UP00033
Motif name:	Zfp410_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	14
Similarity score:	0.0170835

Alignment:

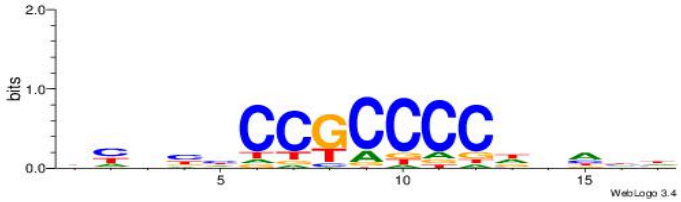
```
BHHBHCCGCCCCDHHHH
SSHCCCSGCCCCSG---
```

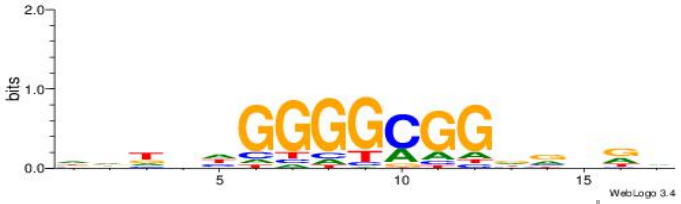
Original motif

Consensus sequence: BHHBHCCGCCCCDHHHH

Reverse complement motif

Consensus sequence: HHHHDGGGGCGGDBHDV





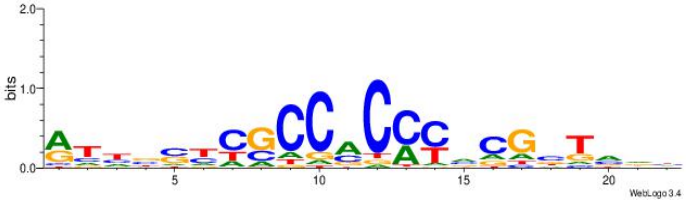
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	14
Similarity score:	0.0203409

Alignment:

```
RTHBSYCGCCMCMYVCGBTVDH
---SSHCCCSGCCCCSG-----
```

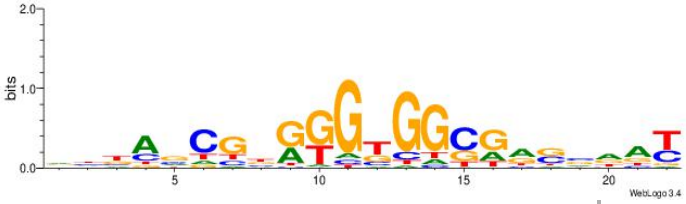
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



Motif ID:	UP00099

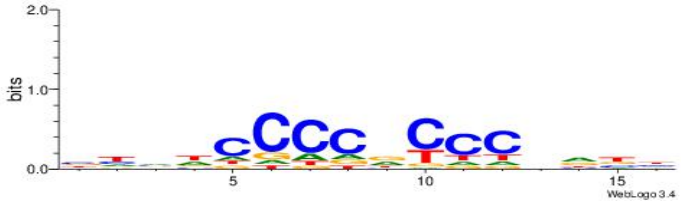
Motif name:	Ascl2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	14
Similarity score:	0.0229345

Alignment:

```
HVDVGGGHGGGGDBHB
-CSGGGGCSGGGDSS-
```

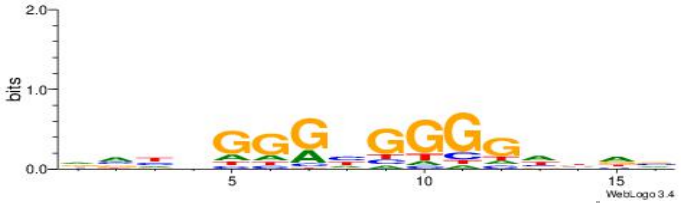
Original motif

Consensus sequence: BHVDCCCCDCCCBDBH



Reverse complement motif

Consensus sequence: HVDVGGGHGGGGDBHB

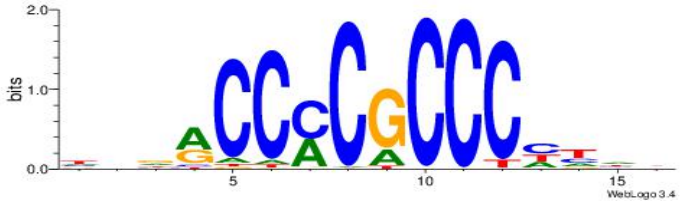


Motif ID:	UP00093
Motif name:	Klf7_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	14

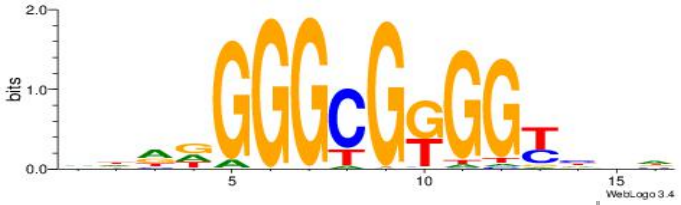
Similarity score: 0.0239192

Alignment:
DHHDGGGCGRGGKHBH
-CSGGGGCSGGGDSS-

Original motif
Consensus sequence: HBDRCCMCGCCCHHHD



Reverse complement motif
Consensus sequence: DHHDGGGCGRGGKHBH

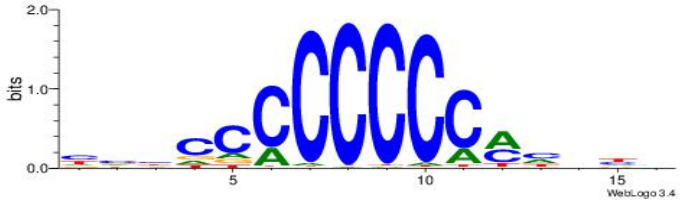


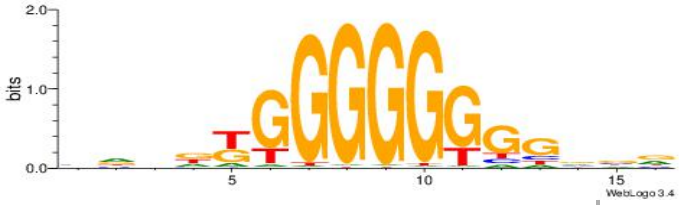
Motif ID: UP00022
Motif name: Zfp740_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 2
Number of overlap: 14
Similarity score: 0.0245603

Alignment:
HVBCCCCCCCCMHHHB
-SSHCCCSGCCCCSG-

Original motif
Consensus sequence: HVBCCCCCCCCMHHHB

Reverse complement motif
Consensus sequence: BHHDYGGGGGGGGBVD

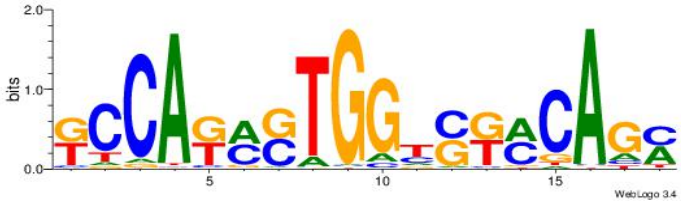




Dataset #: 1 **Motif ID: 95** **Motif name: C095**

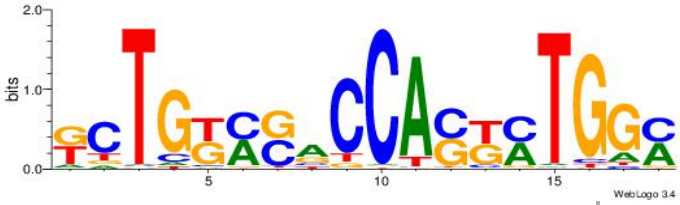
Original motif

Consensus sequence: KCCAKMSTGGTSKMCAGM



Reverse complement motif

Consensus sequence: RCTGYYSACCASYYTGGY



Best Matches for Motif ID 95 (Highest to Lowest)

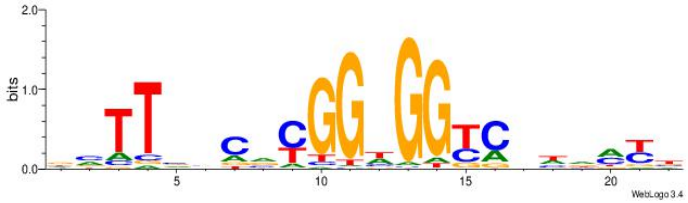
Motif ID:	UP00540
Motif name:	Gli3_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	18
Similarity score:	0.0278633

Alignment:

VMYDHDGMCCHCCKBGVVAAVH
RCTGYYSACCASYYTGGY----

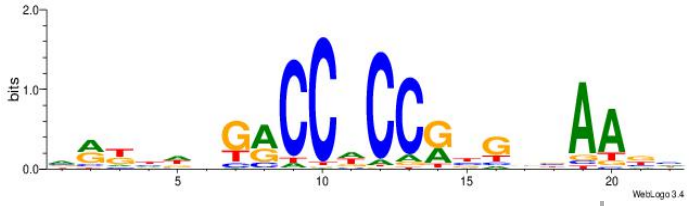
Original motif

Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



Reverse complement motif

Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH



Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	18
Similarity score:	0.0281669

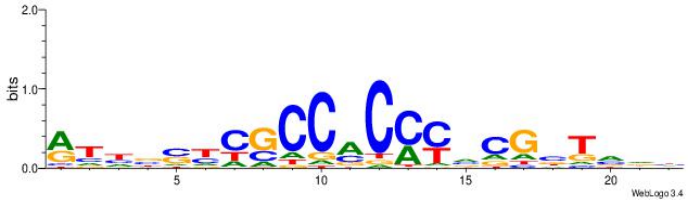
Alignment:
RTHBSYCGCCMCMYVCGBTVDH
RCTGYYSACCASYYTGGY----

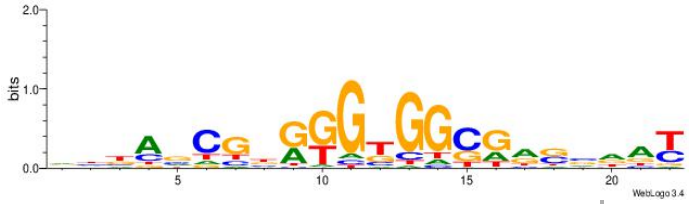
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH

Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK





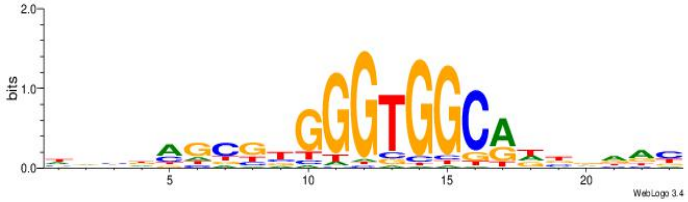
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	18
Similarity score:	0.033095

Alignment:

```
BDDHVDKGCCACCCVCGCTDBVH
----RCTGYYSACCASYYTGGY-
```

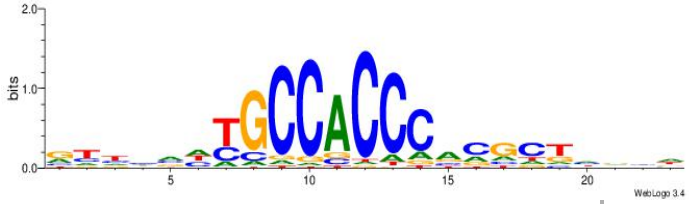
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



Motif ID: UP00540

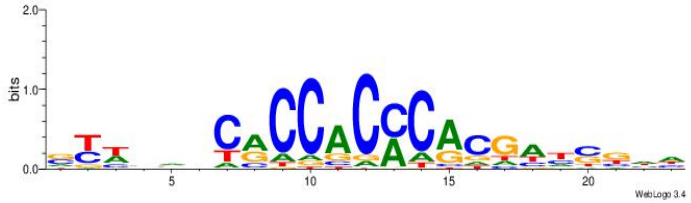
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	18
Similarity score:	0.036897

Alignment:

```
HHBSHTCGTGRGTGGKGDBVWMV
-----KCCAKMSTGGTSKMCAGM
```

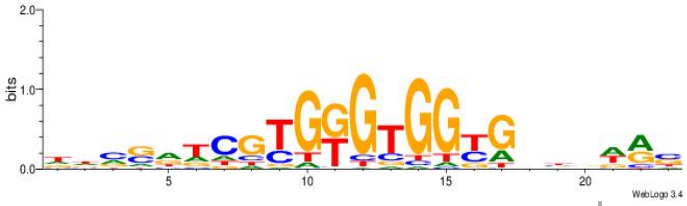
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV

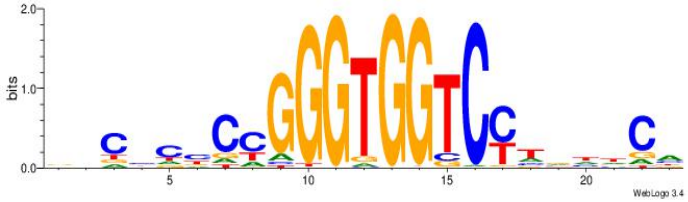


Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	18

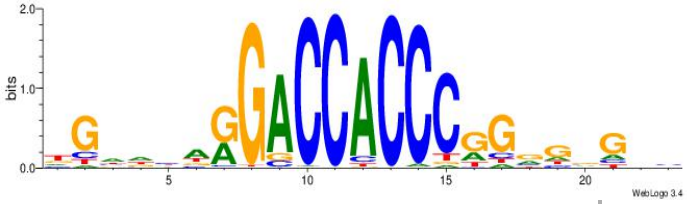
Similarity score: 0.0379359

Alignment:
HGDHVHKGACCACCCGGBGBGDB
-RCTGYYSACCASYYTGGY----

Original motif
Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH

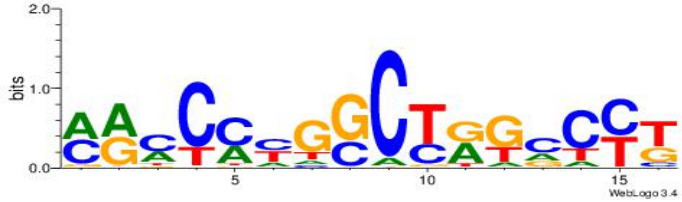


Reverse complement motif
Consensus sequence: HGDHVHKGACCACCCGGBGBGDB

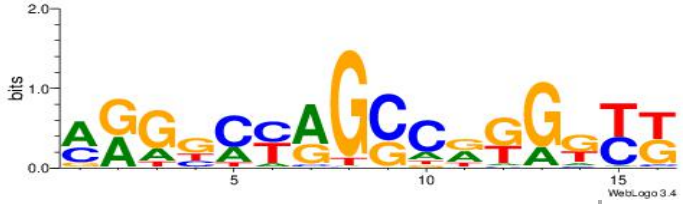


Dataset #: 1 Motif ID: 96 Motif name: C096

Original motif
Consensus sequence: MRMCMYGSCYRGCCYK



Reverse complement motif
Consensus sequence: RKGGCMMGSCKRGRKY



Best Matches for Motif ID 96 (Highest to Lowest)

Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement

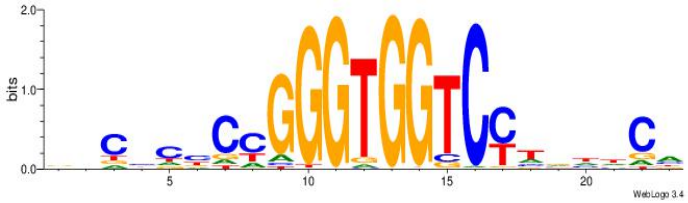
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	16
Similarity score:	0.0346607

Alignment:

```
HGDHVHKGACCACCCGGBGBGDB
-----RKGGCMMGSCKRGRKY--
```

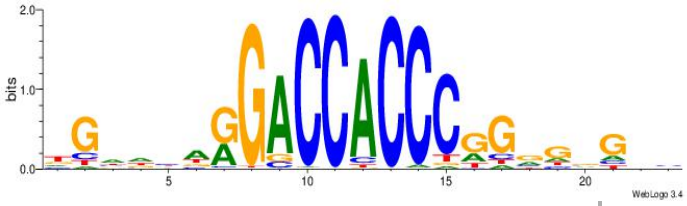
Original motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif

Consensus sequence: HGDHVHKGACCACCCGGBGBGDB



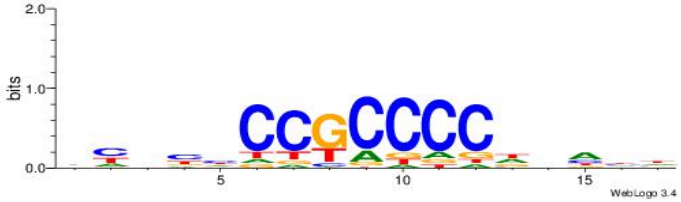
Motif ID:	UP00033
Motif name:	Zfp410_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	16
Similarity score:	0.0356309

Alignment:

```
BHHBHCCGCCCCDHHHH
-MRMCMYGSCYRGCCYK
```

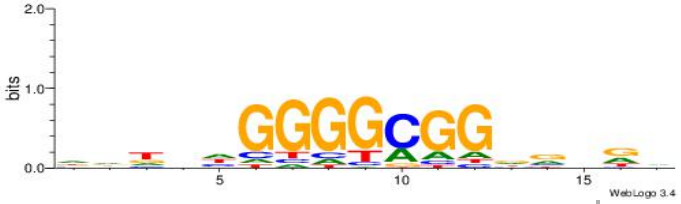
Original motif

Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif

Consensus sequence: HHHHDGGGGCGGDBHDV



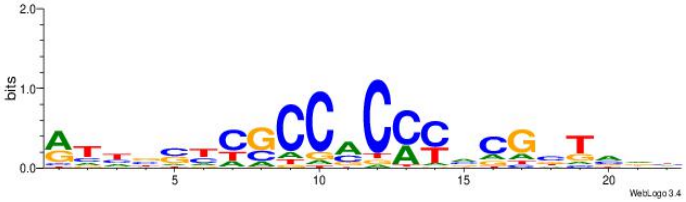
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	16
Similarity score:	0.0379898

Alignment:

```
HDBABCGBKRGYGGCGMSBHAK
--MRMCMYGSCYRGCCYK----
```

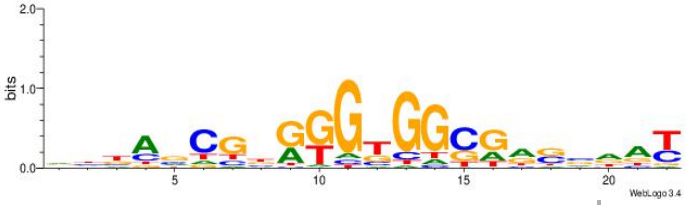
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



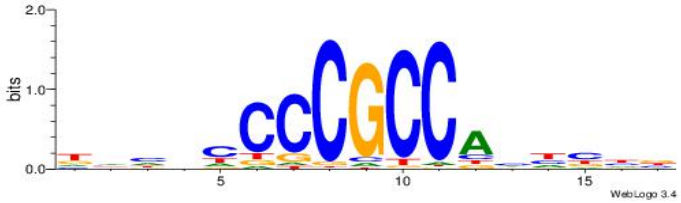
Motif ID:	UP00000
Motif name:	Smad3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	16
Similarity score:	0.0407626

Alignment:

```
DHHBCCCCGCCAHHBHB
-MRMCMYGSCYRGCCYK
```

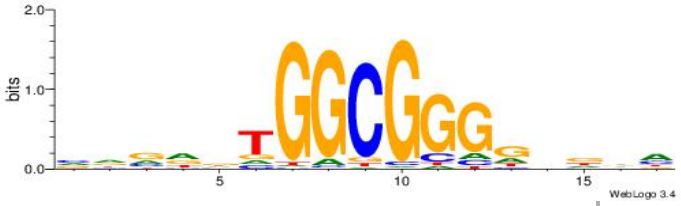
Original motif

Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif

Consensus sequence: BHBHDTGGCGGGGBDHD

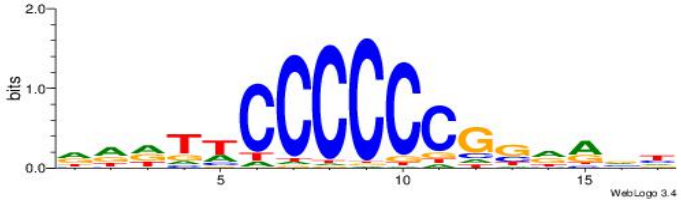


Motif ID:	UP00022
Motif name:	Zfp740_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1

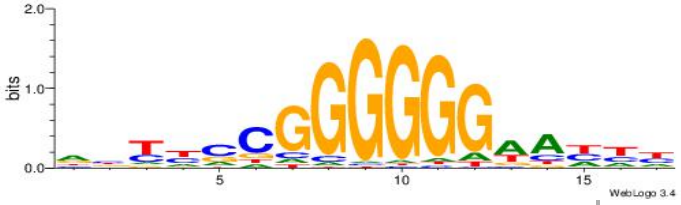
Number of overlap: 16
Similarity score: 0.0416066

Alignment:
HVKDCCGGGGGGWADDD
-RKGGCMMGSCKRGRKY

Original motif
Consensus sequence: DDDTWCCCCCCGGDRVH

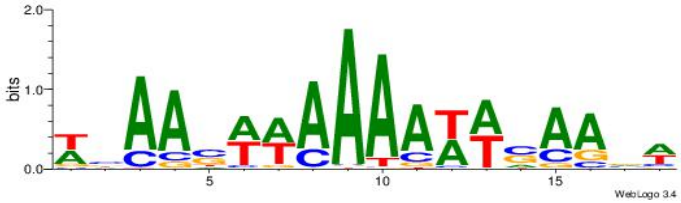


Reverse complement motif
Consensus sequence: HVKDCCGGGGGGWADDD

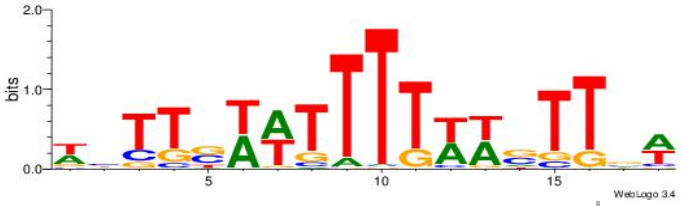


Dataset #: 1 Motif ID: 97 Motif name: C097

Original motif
Consensus sequence: WBAASWWAAAAWWSAAVW



Reverse complement motif
Consensus sequence: WVTTSWWTTTTWWSTTBW



Best Matches for Motif ID 97 (Highest to Lowest)

Motif ID: UP00034
Motif name: Sox7_primary
Species: Mus musculus

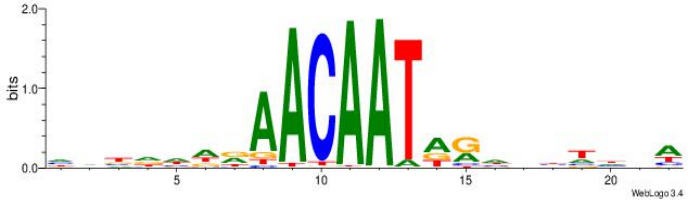
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	18
Similarity score:	0.032986

Alignment:

```
WBHHHHHMDATTGTTHDHDVHH
---WVTTSWWTTTTWWSTTBW-
```

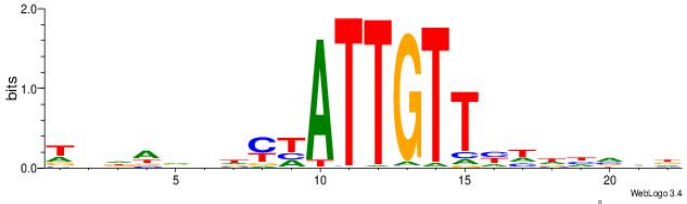
Original motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW



Reverse complement motif

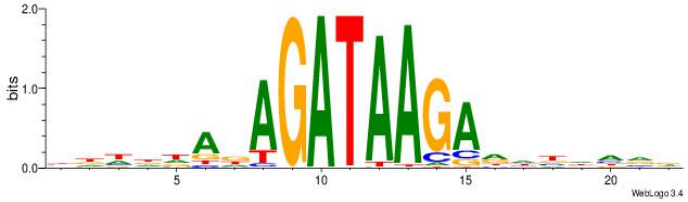
Consensus sequence: WBHHHHHMDATTGTTHDHDVHH



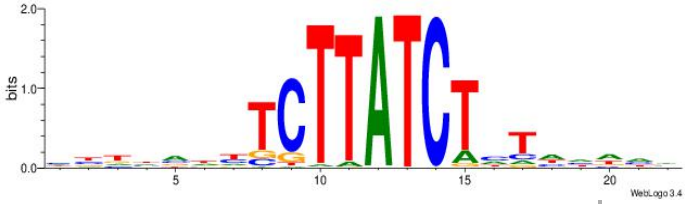
Motif ID:	UP00032
Motif name:	Gata3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	18
Similarity score:	0.0395253

Alignment:
HBHDVHDTCTTATCTHTDDHDV
WVTTSWWTTTTWWSTTBW----

Original motif
Consensus sequence: BDHDDADAGATAAGADHBDHVD



Reverse complement motif
Consensus sequence: HBHDVHDTCTTATCTHTDDHDV

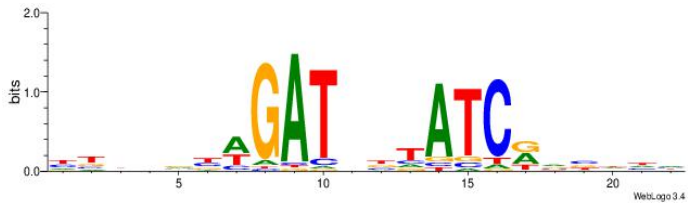


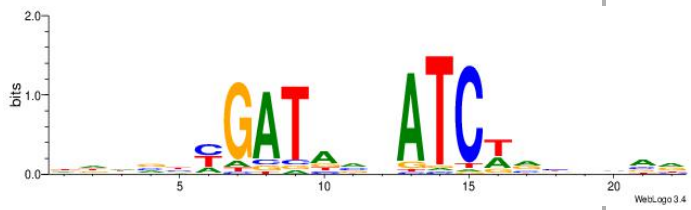
Motif ID:	UP00032
Motif name:	Gata3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	18
Similarity score:	0.0483356

Alignment:
HHHBBMGATAVHATCWVVDHVH
----WBAASWWAAAAWWSAAVW

Original motif
Consensus sequence: HBHDVBWGATHBTATCRVBHHH

Reverse complement motif
Consensus sequence: HHHBBMGATAVHATCWVVDHVH





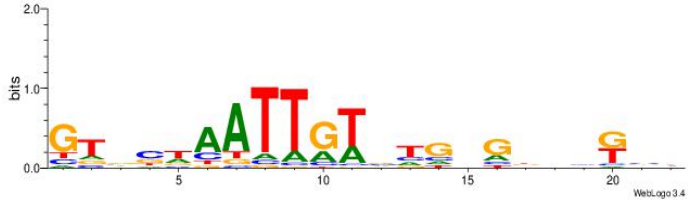
Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	18
Similarity score:	0.0488925

Alignment:

```
VVYDDDCHCAVACAATTDBVAC
----WBAASWWAAAAWWSAAVW
```

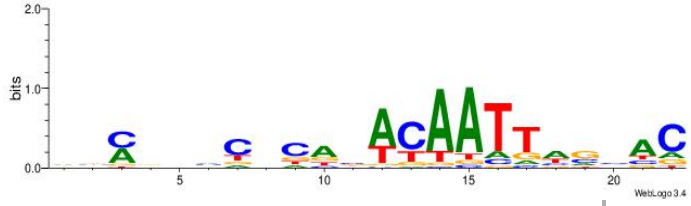
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif

Consensus sequence: VVYDDDCHCAVACAATTDBVAC



Motif ID:	UP00528

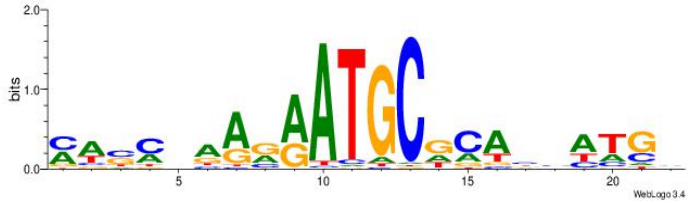
Motif name:	Foxm1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	18
Similarity score:	0.0549213

Alignment:

```
MWSMBAARRATGCDCABHATGD
-WBAASWWAAAAWWSAAVW---
```

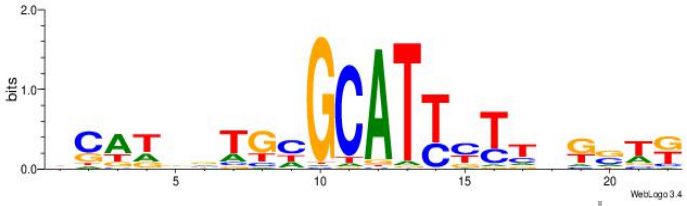
Original motif

Consensus sequence: MWSMBAARRATGCDCABHATGD



Reverse complement motif

Consensus sequence: DCATDBTGHGCATKMTTBRSWR



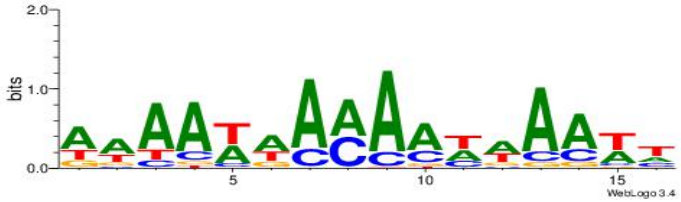
Dataset #: 1 **Motif ID: 98** **Motif name: C098**

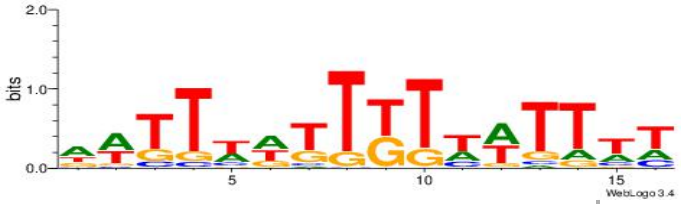
Original motif

Consensus sequence: AAAAWWAMAAWWAAWH

Reverse complement motif

Consensus sequence: HWTTWWTTYTWWTTTT





Best Matches for Motif ID 98 (Highest to Lowest)

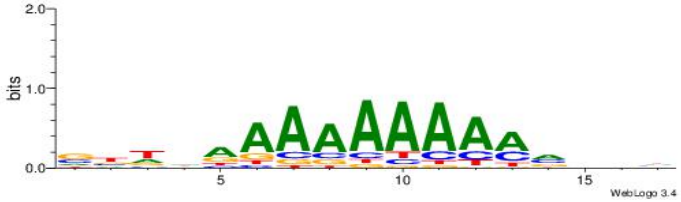
Motif ID:	UP00077
Motif name:	Srf_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	16
Similarity score:	0.0386561

Alignment:

```
VBDDAAAAAAAAMVBHH
-AAAAWWAMAAWWAAWH
```

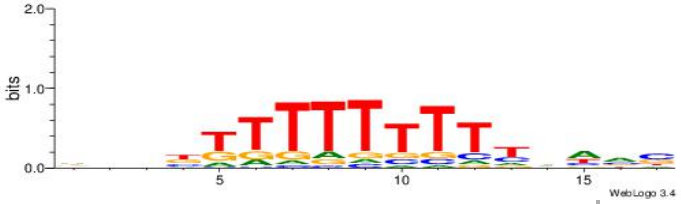
Original motif

Consensus sequence: VBDDAAAAAAAAMVBHH



Reverse complement motif

Consensus sequence: HHVBYTTTTTTTTDDVV



Motif ID: UP00051

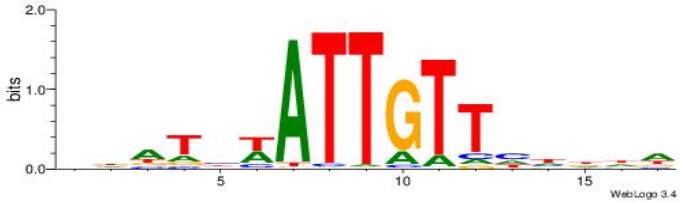
Motif name:	Sox8_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	16
Similarity score:	0.0410043

Alignment:

```
DDDHDAACAATWBATDD
AAAAWWAMAAWWAAWH-
```

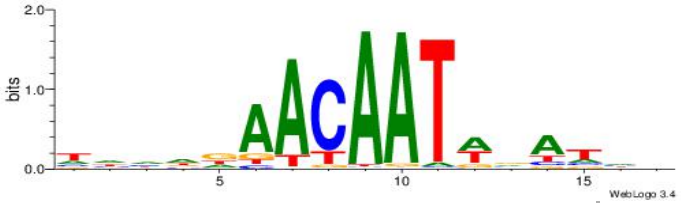
Original motif

Consensus sequence: DDATBWATTGTTHHDDD



Reverse complement motif

Consensus sequence: DDDHDAACAATWBATDD

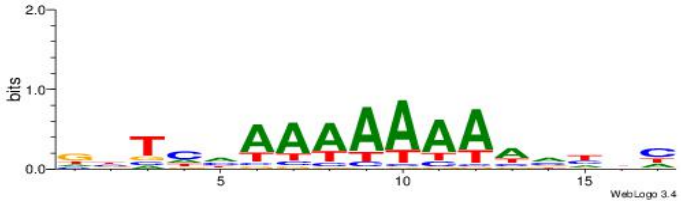


Motif ID:	UP00090
Motif name:	Elf3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	16

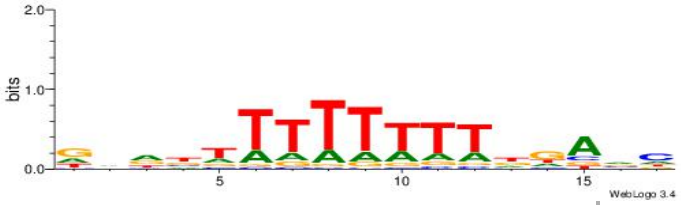
Similarity score: 0.0419783

Alignment:
DBTHHAAAAAAAAVHDH
AAAAWWAMAAWWAAWH-

Original motif
Consensus sequence: DBTHHAAAAAAAAVHDH



Reverse complement motif
Consensus sequence: DDHBTTTTTTTTHDAVH

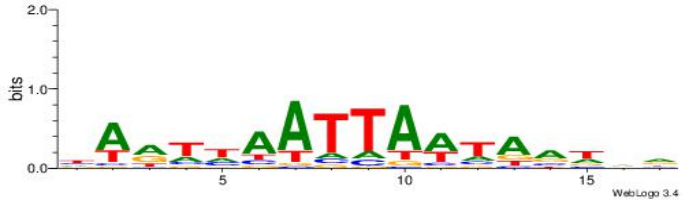


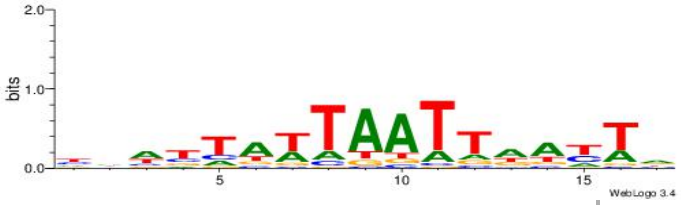
Motif ID:	UP00255
Motif name:	Dbx1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	16
Similarity score:	0.0419915

Alignment:
HARTHAATTAWTAVDHD
AAAAWWAMAAWWAAWH-

Original motif
Consensus sequence: HARTHAATTAWTAVDHD

Reverse complement motif
Consensus sequence: DHDBTAWTAATTHAKTH





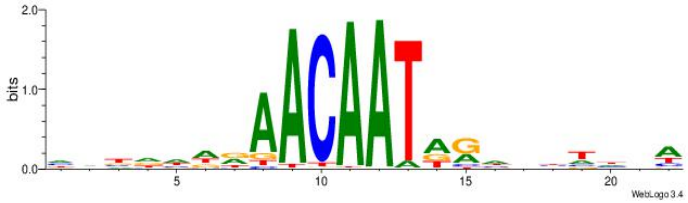
Motif ID:	UP00034
Motif name:	Sox7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	16
Similarity score:	0.0430251

Alignment:

```
HHBDHDDAACAATDRHHHHHBW
--AAAAWWAMAAWWAAWH----
```

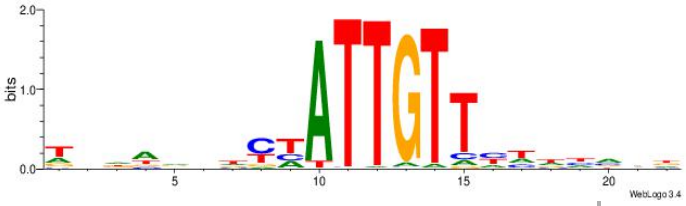
Original motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW



Reverse complement motif

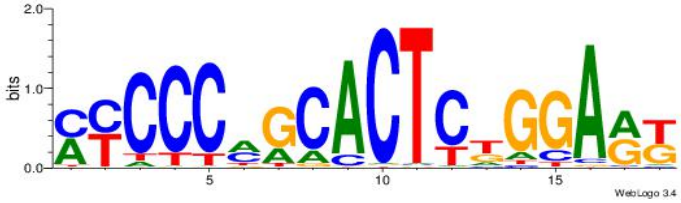
Consensus sequence: WBHHHHHMDATTGTTHDHDVHH



Dataset #: 1 **Motif ID: 99** **Motif name: C099**

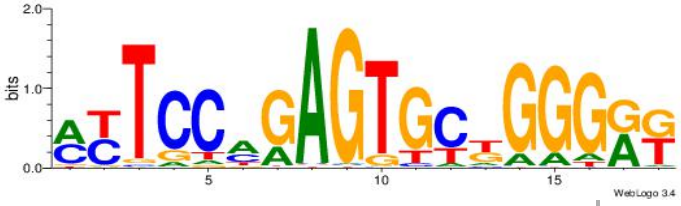
Original motif

Consensus sequence: MYCCCMGCACTCKGGARK



Reverse complement motif

Consensus sequence: RKTCCRGAGTGCYGGGKR



Best Matches for Motif ID 99 (Highest to Lowest)

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:	3
Number of overlap:	18
Similarity score:	0.0318658

Alignment:

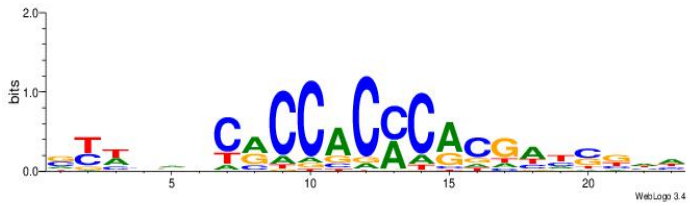
```
HHBSHTCGTGRGTGGKGDBVWMV
---RKTCCRGAGTGCYGGGKR--
```

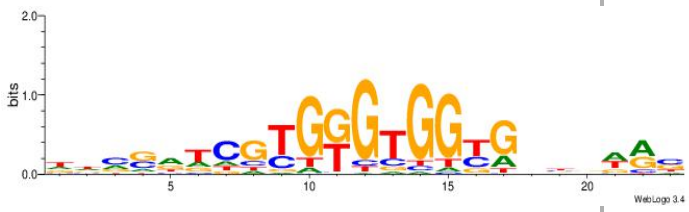
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH

Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV





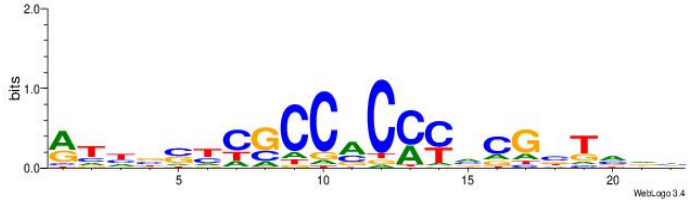
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	18
Similarity score:	0.0366211

Alignment:

```
RTHBSYCGCCMCMYVCGBTVDH
----MYCCCMGCACTCKGGARK
```

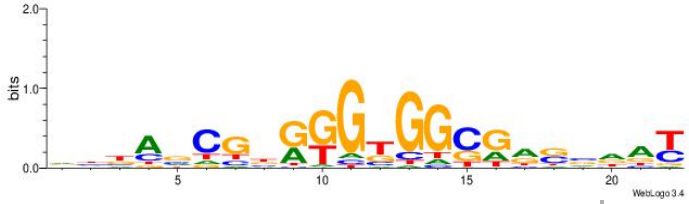
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



Motif ID:	UP00526

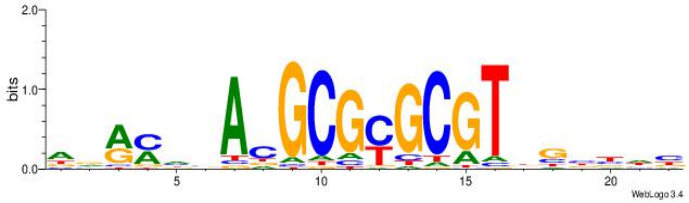
Motif name:	Foxn1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	18
Similarity score:	0.0404912

Alignment:

```
BDVBCDACGCKCGCGTBHRKHD
--MYCCCMGCACTCKGGARK--
```

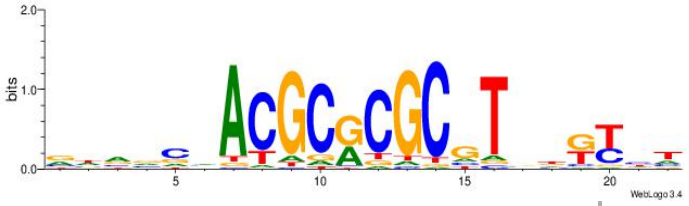
Original motif

Consensus sequence: DDRMHBACGCGYGCGTDGBBDB



Reverse complement motif

Consensus sequence: BDVBCDACGCKCGCGTBHRKHD

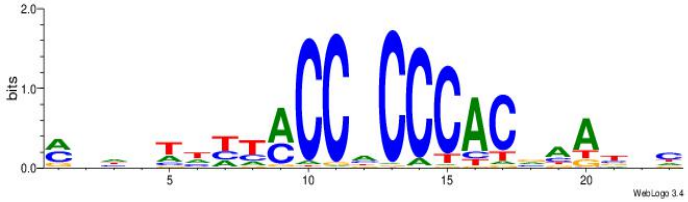


Motif ID:	UP00538
Motif name:	Gli1_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	18

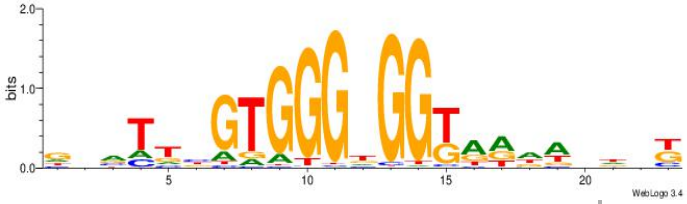
Similarity score: 0.0438598

Alignment:
MHHHWHYTMCCHCCCACVAABVH
---MYCCCMGCACTCKGGARK--

Original motif
Consensus sequence: MHHHWHYTMCCHCCCACVAABVH



Reverse complement motif
Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY

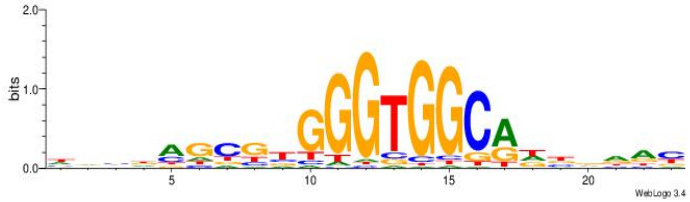


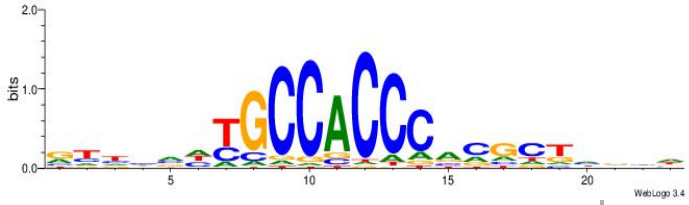
Motif ID: UP00538
Motif name: Gli1_v016060_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 3
Number of overlap: 18
Similarity score: 0.0443498

Alignment:
HVBDAGCGBGGGTGGCRDBDDDB
---RKTCCRGAGTGCYGGGKR--

Original motif
Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB

Reverse complement motif
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH

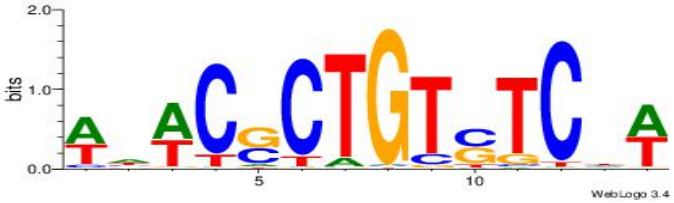




Dataset #: 1 **Motif ID: 100** **Motif name: C100**

Original motif

Consensus sequence: WDWCSCTGTSTCHW



Reverse complement motif

Consensus sequence: WHGASACAGSGWDW

Best Matches for Motif ID 100 (Highest to Lowest)

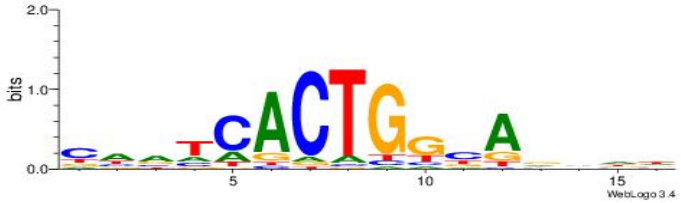
Motif ID:	UP00031
Motif name:	Zbtb3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0211347

Alignment:

CHVTCACTGGBADHDD
-WDWCSCTGTSTCHW-

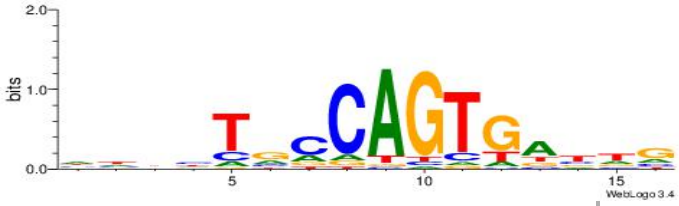
Original motif

Consensus sequence: CHVTCACTGGBADHDD



Reverse complement motif

Consensus sequence: DDHHTBCCAGTGABHG



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:	Forward
Position number:	2
Number of overlap:	14
Similarity score:	0.0255389

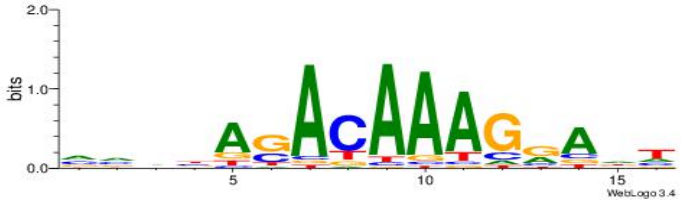
Alignment:
HDTMCTTTGTSTVDBB
-WDWCSCTGTSTCHW-

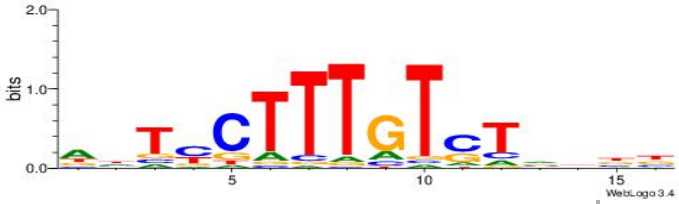
Original motif

Consensus sequence: VVDBASACAAAGRADH

Reverse complement motif

Consensus sequence: HDTMCTTTGTSTVDBB





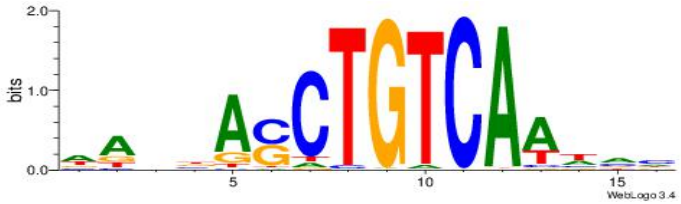
Motif ID:	UP00210
Motif name:	Mrg2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	14
Similarity score:	0.0263585

Alignment:

```
DBHTTGACAGSTVDTD
-WHGASACAGSGWDW-
```

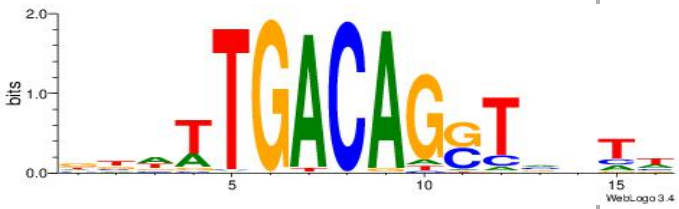
Original motif

Consensus sequence: DADBASCTGTCAAHVH



Reverse complement motif

Consensus sequence: DBHTTGACAGSTVDTD



Motif ID:	UP00098

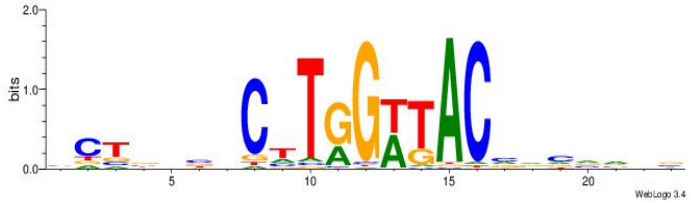
Motif name:	Rfx3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	10
Number of overlap:	14
Similarity score:	0.0316143

Alignment:

```
VCTBHBVCTTGGWTACVVVVVDB
---------WHGASACAGSGWDW
```

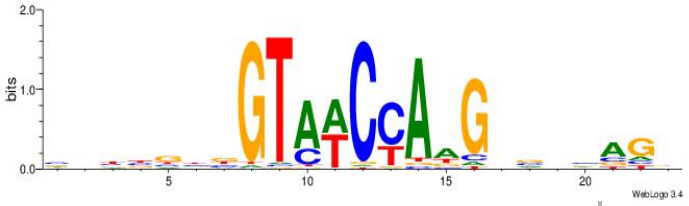
Original motif

Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB



Reverse complement motif

Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB

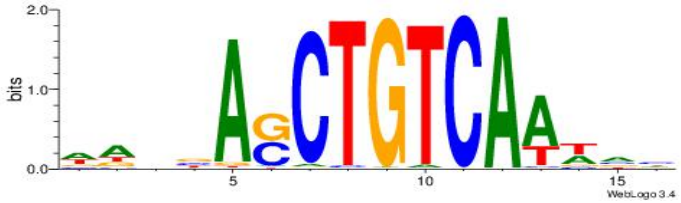


Motif ID:	UP00186
Motif name:	Meis1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	14

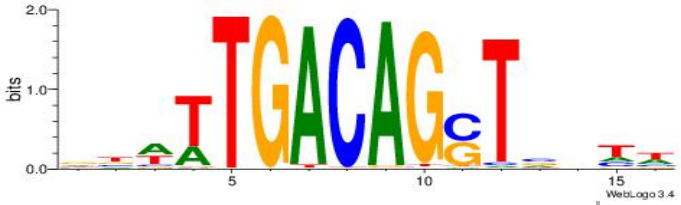
Similarity score: 0.0316571

Alignment:
DBWTTGACAGSTBVTW
-WHGASACAGSGWDW-

Original motif
Consensus sequence: WAVBASCTGTCAAWVH

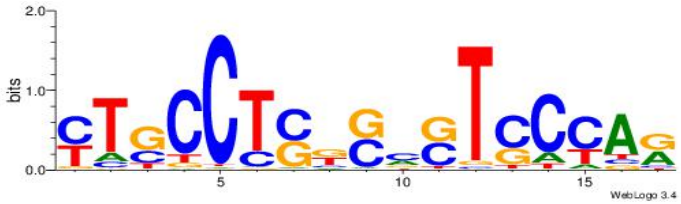


Reverse complement motif
Consensus sequence: DBWTTGACAGSTBVTW

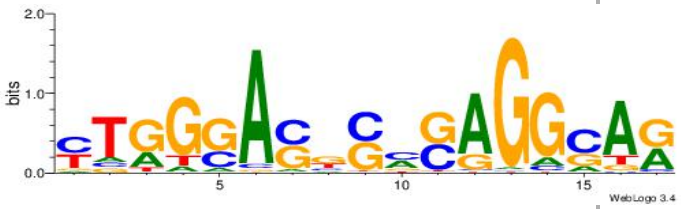


Dataset #: 1 Motif ID: 101 Motif name: C101

Original motif
Consensus sequence: YTSCCTSKSVSTCCCAR



Reverse complement motif
Consensus sequence: MTGGGASVSYSAGGSAK



Best Matches for Motif ID 101 (Highest to Lowest)

Motif ID:	UP00527
Motif name:	Foxn4_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif

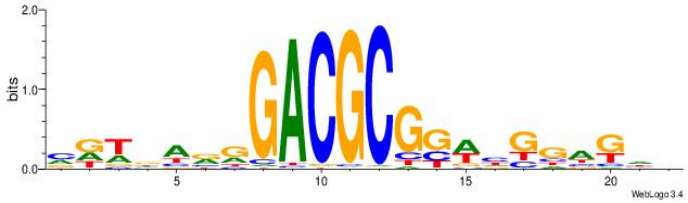
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	17
Similarity score:	0.0379768

Alignment:

```
VHYTCCDWCCGCGTCMMTHWHV
--YTSCCTSKSVSTCCCAR---
```

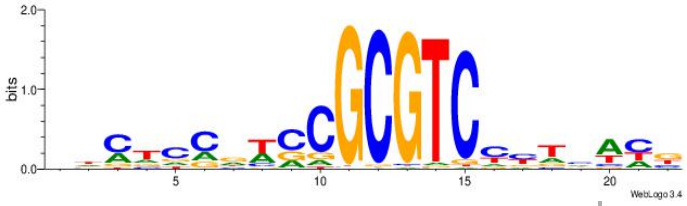
Original motif

Consensus sequence: VDWDARRGACGCGGWHGGAKHV



Reverse complement motif

Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV



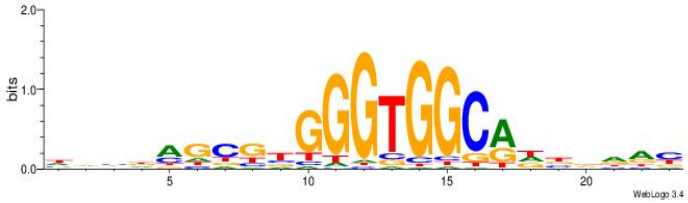
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	17
Similarity score:	0.043481

Alignment:

HVBDAGCGBGGGTGGCRDBDDDB
-MTGGGASVSYSAGGSAK-----

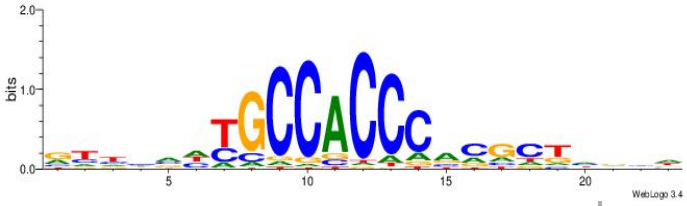
Original motif

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:	1
Number of overlap:	17
Similarity score:	0.0446789

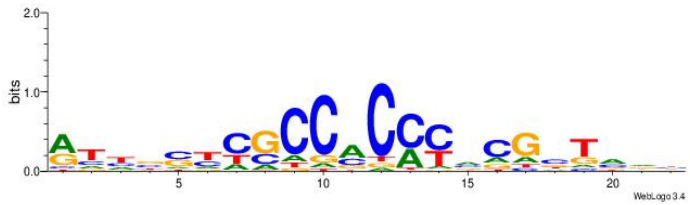
Alignment:
RTHBSYCGCCMCMYVCGBTVDH
-----YTSCCTSKSVSTCCCAR

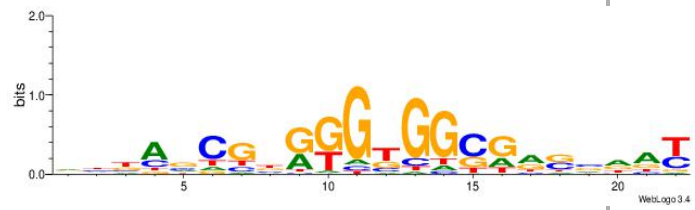
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH

Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK





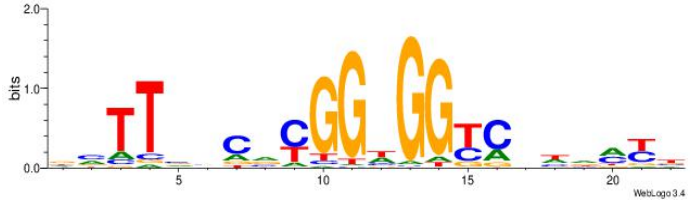
Motif ID:	UP00540
Motif name:	Gli3_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	17
Similarity score:	0.0447452

Alignment:

```
DVTTVVCVYGGHGGYCHHDMYB
--YTSCCTSKSVSTCCCAR---
```

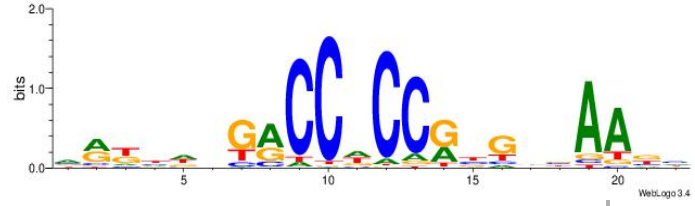
Original motif

Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



Reverse complement motif

Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH



Motif ID:	UP00400

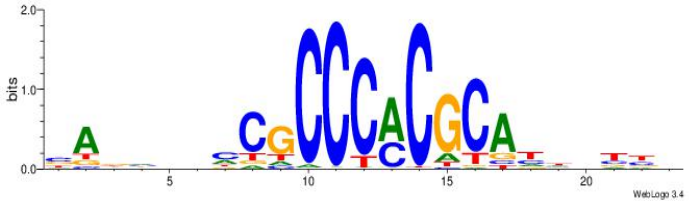
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	17
Similarity score:	0.0464938

Alignment:

```
BADHBDHCGCCCMCGCAHHDBBV
-MTGGGASVSYSAGGSAK-----
```

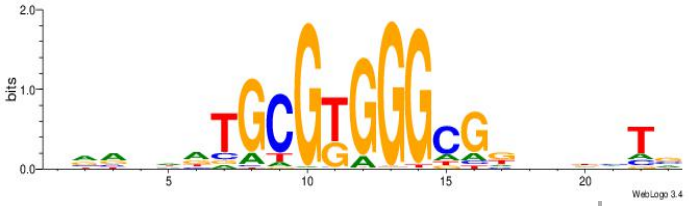
Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif

Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB



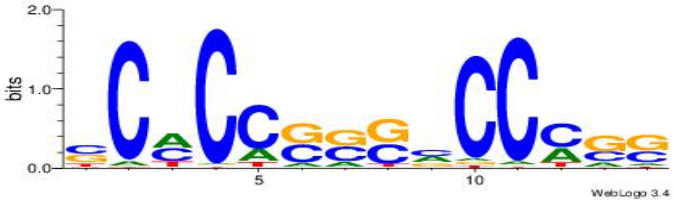
Dataset #: 1 Motif ID: 102 Motif name: C102

Original motif

Consensus sequence: SCMCCSSSVCCMSS

Reverse complement motif

Consensus sequence: SSRGGVSSSGGYGS



Best Matches for Motif ID 102 (Highest to Lowest)

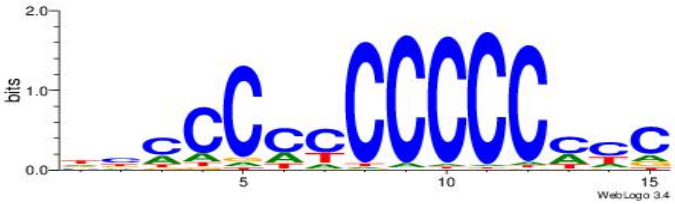
Motif ID:	UP00021
Motif name:	Zfp281_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	14
Similarity score:	0.0109986

Alignment:

```
DBCCCCCCCCCCMYC
-SCMCCSSSVCCMSS
```

Original motif

Consensus sequence: DBCCCCCCCCCCMYC



Reverse complement motif

Consensus sequence: GKRGGGGGGGGGBD

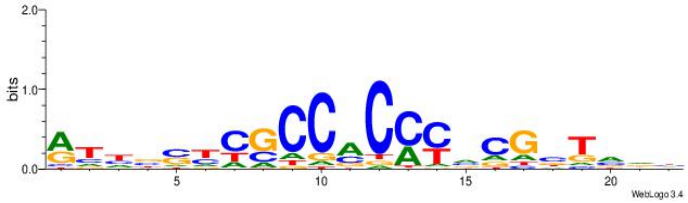
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	7
Number of overlap:	14
Similarity score:	0.0204348

Alignment:

```
RTHBSYCGCCMCMYVCGBTVDH
--SCMCCSSSVCCMSS------
```

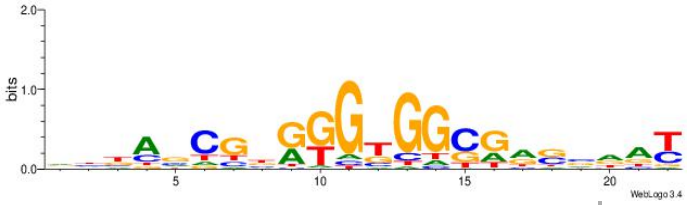
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK

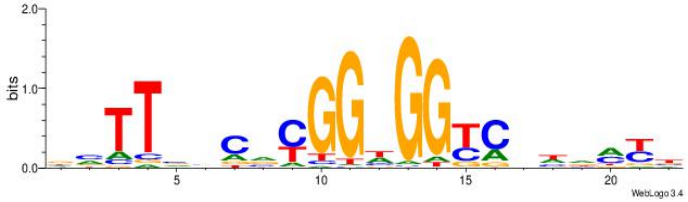


Motif ID:	UP00540
Motif name:	Gli3_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	14

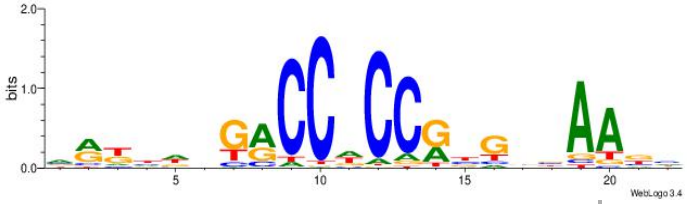
Similarity score: 0.0214073

Alignment:
DVTTVVCVYGGHGGYCHHDMYB
--------SCMCCSSSVCCMSS

Original motif
Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



Reverse complement motif
Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH

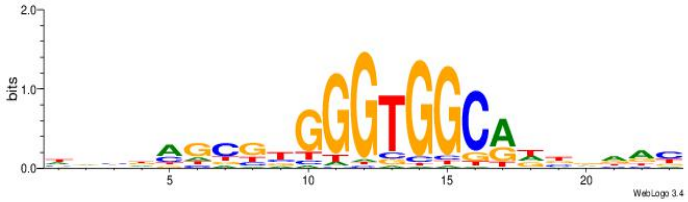


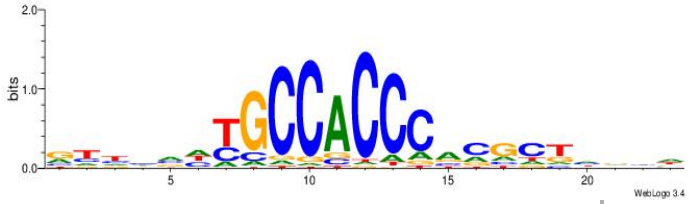
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0236835

Alignment:
BDDHVDKGCCACCCVCGCTDBVH
--------SCMCCSSSVCCMSS-

Original motif
Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB

Reverse complement motif
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH





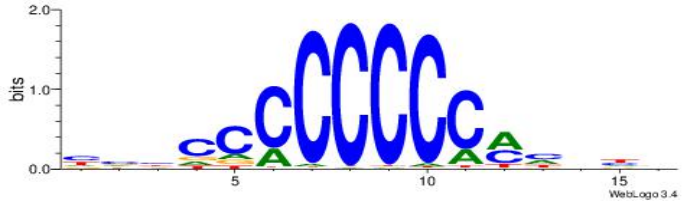
Motif ID:	UP00022
Motif name:	Zfp740_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.024744

Alignment:

```
HVBCCCCCCCCMHHHB
SCMCCSSSVCCMSS--
```

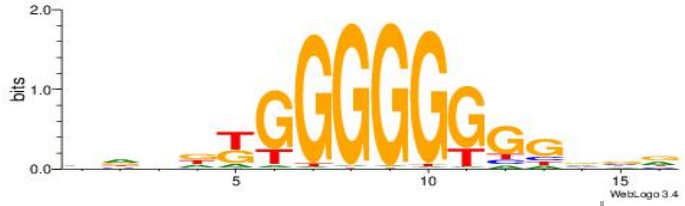
Original motif

Consensus sequence: HVBCCCCCCCCMHHHB



Reverse complement motif

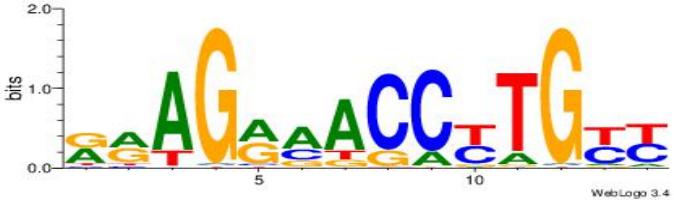
Consensus sequence: BHHDYGGGGGGGGBVD



Dataset #: 1 Motif ID: 103 Motif name: C103

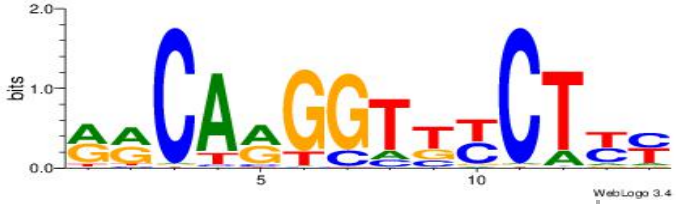
Original motif

Consensus sequence: RRAGRAACCYTGYY



Reverse complement motif

Consensus sequence: MMCAMGGTTKCTKM



Best Matches for Motif ID 103 (Highest to Lowest)

Motif ID:	UP00098
Motif name:	Rfx3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	14
Similarity score:	0.0387119

Alignment:

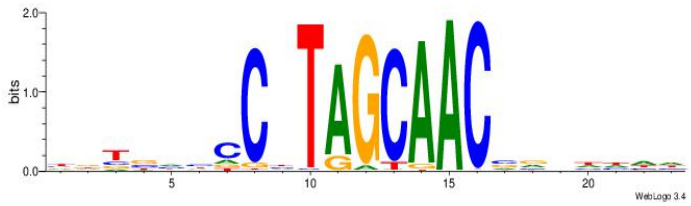
```
HHHHDVVGTTGCTAHGGDHBAHH
-MMCAMGGTTKCTKM--------
```

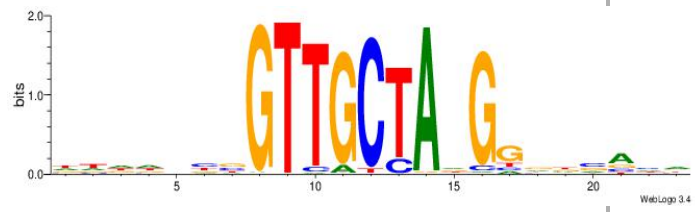
Original motif

Consensus sequence: HDTBHHCCHTAGCAACVVDHHHH

Reverse complement motif

Consensus sequence: HHHHDVVGTTGCTAHGGDHBAHH





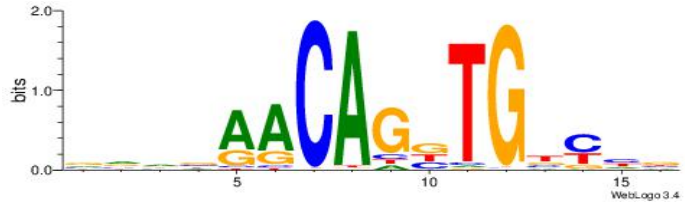
Motif ID:	UP00036
Motif name:	Myf6_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0405304

Alignment:

```
VVDBAACAGBTGBYHB
RRAGRAACCYTGYY--
```

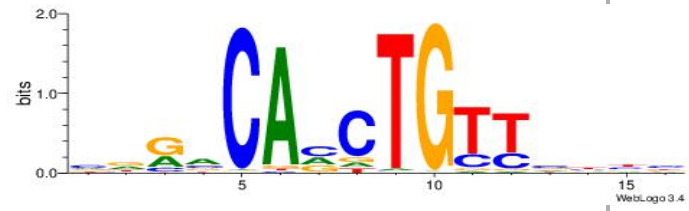
Original motif

Consensus sequence: VVDBAACAGBTGBYHB



Reverse complement motif

Consensus sequence: BDKVCABCTGTTBDBV



Motif ID:	UP00098

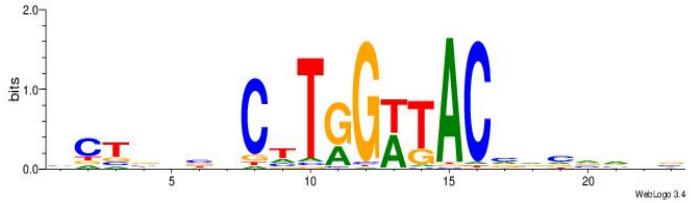
Motif name:	Rfx3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	14
Similarity score:	0.0407907

Alignment:

```
BDBBVBVGTAWCCAAGVBHBAGB
----RRAGRAACCYTGYY-----
```

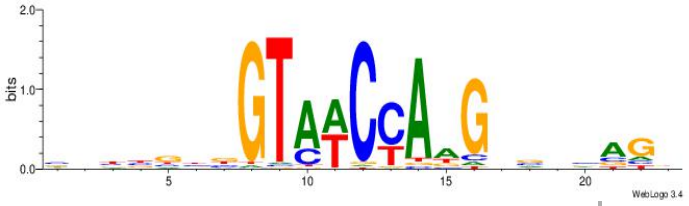
Original motif

Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB



Reverse complement motif

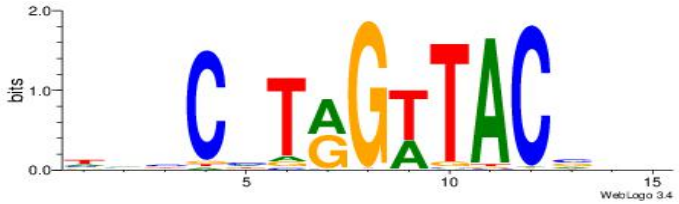
Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB



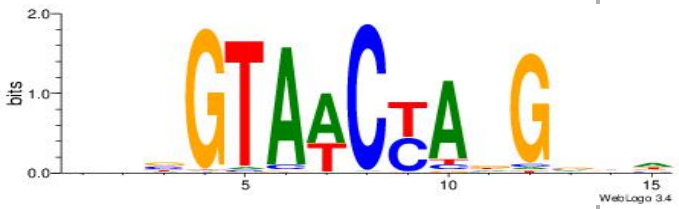
Motif ID:	UP00056
Motif name:	Rfx4_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0414662

Alignment:
HVVGTAWCKADGBHH
-MMCAMGGTTKCTKM

Original motif
Consensus sequence: HHBCHTRGWTACVVH



Reverse complement motif
Consensus sequence: HVVGTAWCKADGBHH

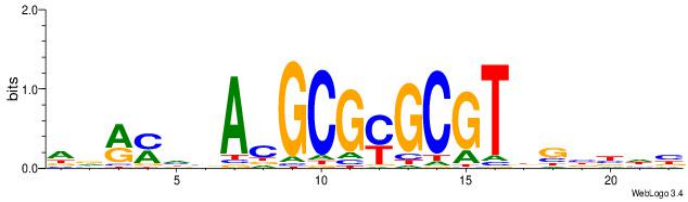


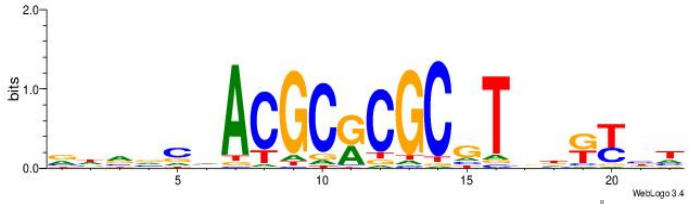
Motif ID:	UP00526
Motif name:	Foxn1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	14
Similarity score:	0.0421016

Alignment:
DDRMHBACGCGYGCGTDGBBDB
---MMCAMGGTTKCTKM-----

Original motif
Consensus sequence: DDRMHBACGCGYGCGTDGBBDB

Reverse complement motif
Consensus sequence: BDVBCDACGCKCGCGTBHRKHD

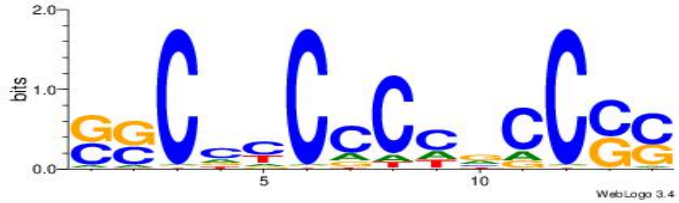




Dataset #: 1 **Motif ID: 104** **Motif name: C104**

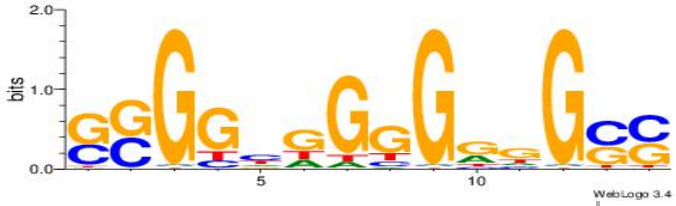
Original motif

Consensus sequence: SSCCYCCCCDCCSS



Reverse complement motif

Consensus sequence: SSGGHGGGGKGGSS



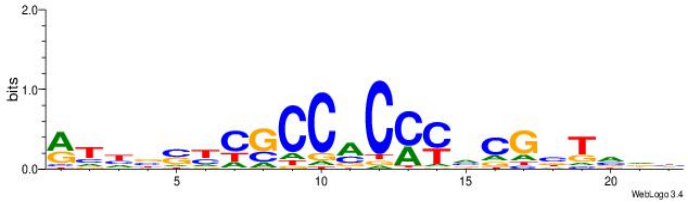
Best Matches for Motif ID 104 (Highest to Lowest)

Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	14
Similarity score:	0.0212662

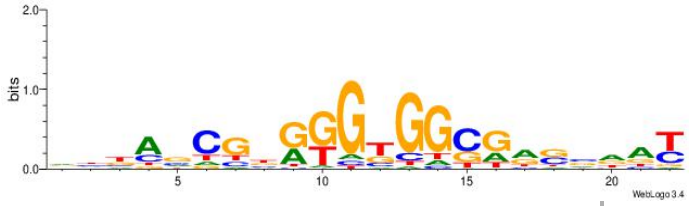
Alignment:

RTHBSYCGCCMCMYVCGBTVDH
----SSCCYCCCCDCCSS----

Original motif
Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif
Consensus sequence: HDBABCGBKRGYGGCGMSBHAK

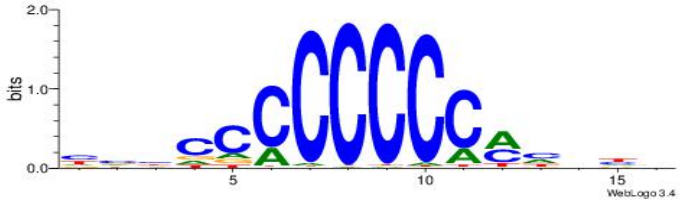


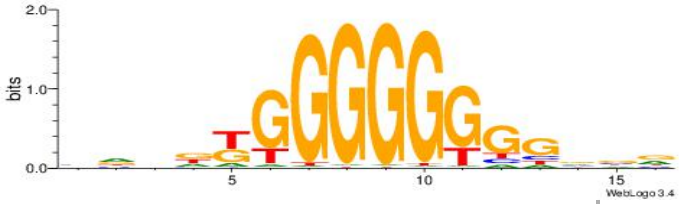
Motif ID:	UP00022
Motif name:	Zfp740_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	14
Similarity score:	0.0241093

Alignment:
BHHDYGGGGGGGGBVD
SSGGHGGGGKGGSS--

Original motif
Consensus sequence: HVBCCCCCCCCMHHHB

Reverse complement motif
Consensus sequence: BHHDYGGGGGGGGBVD





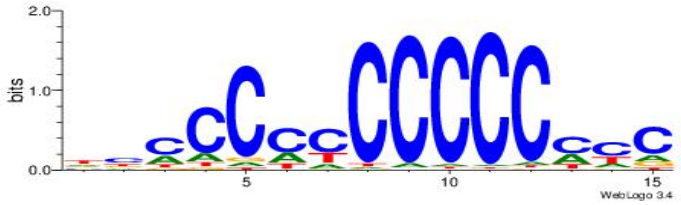
Motif ID:	UP00021
Motif name:	Zfp281_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0261421

Alignment:

```
DBCCCCCCCCCCMYC
SSCCYCCCCDCCSS-
```

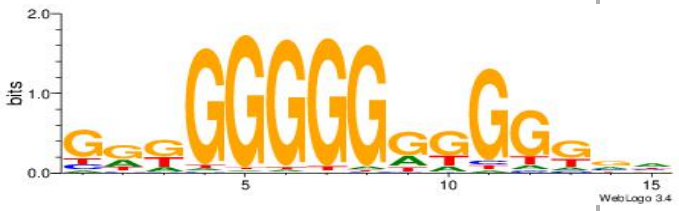
Original motif

Consensus sequence: DBCCCCCCCCCCMYC



Reverse complement motif

Consensus sequence: GKRGGGGGGGGGBD



Motif ID:	UP00043

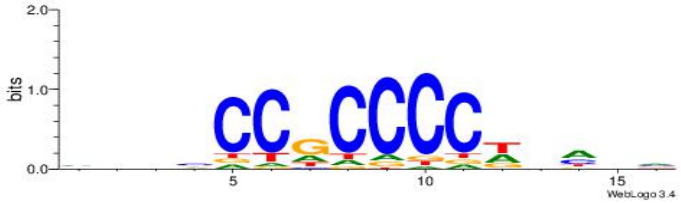
Motif name:	Bcl6b_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	14
Similarity score:	0.0264558

Alignment:

```
HBBBCCGCCCCWHHHV
--SSCCYCCCCDCCSS
```

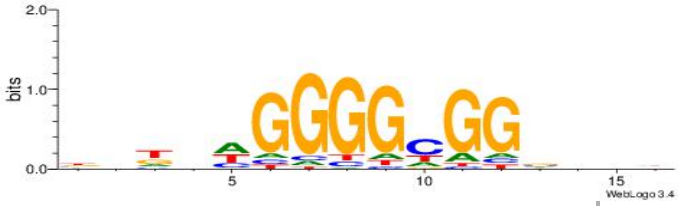
Original motif

Consensus sequence: HBBBCCGCCCCWHHHV



Reverse complement motif

Consensus sequence: BHHHWGGGGCGGBBVH

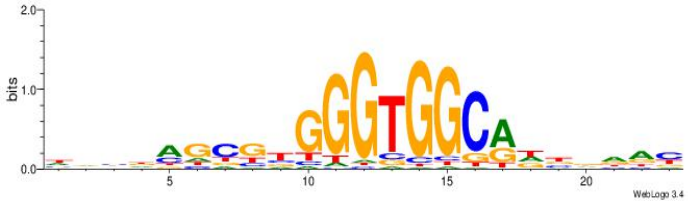


Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	14

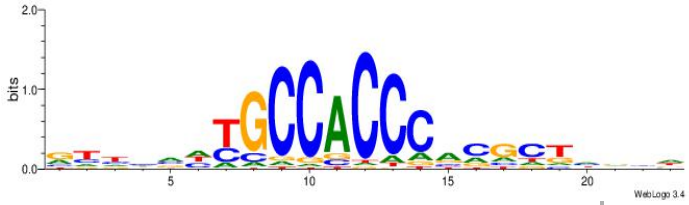
Similarity score: 0.0275752

Alignment:
BDDHVDKGCCACCCVCGCTDBVH
-------SSCCYCCCCDCCSS--

Original motif
Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB

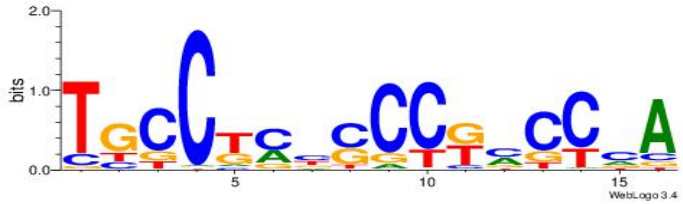


Reverse complement motif
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH

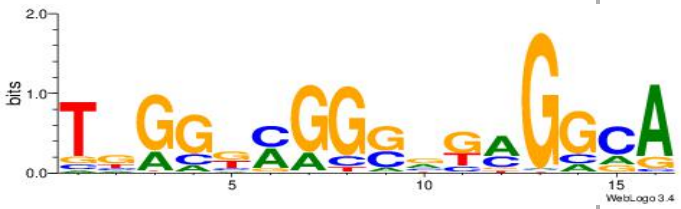


Dataset #: 1 Motif ID: 105 Motif name: C105

Original motif
Consensus sequence: TGCCKMBSCCKMCCVA



Reverse complement motif
Consensus sequence: TVGGRYGGSBRRGGCA



Best Matches for Motif ID 105 (Highest to Lowest)

Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement

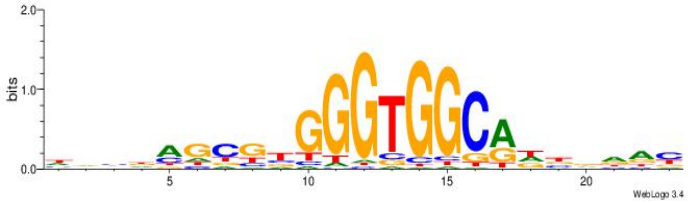
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	16
Similarity score:	0.0398676

Alignment:

```
HVBDAGCGBGGGTGGCRDBDDDB
-TVGGRYGGSBRRGGCA------
```

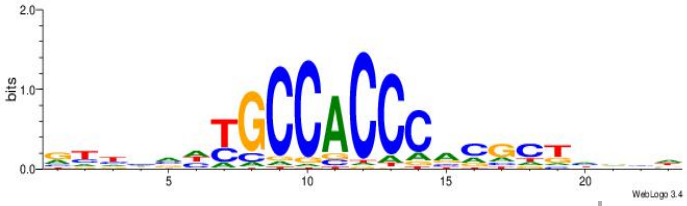
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



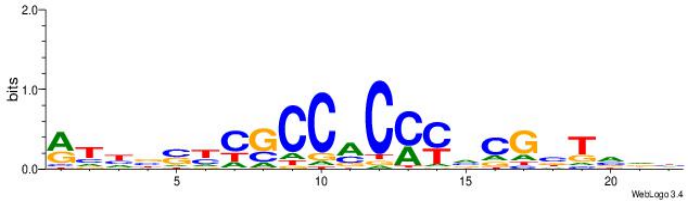
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	16
Similarity score:	0.0413056

Alignment:

HDBABCGBKRGYGGCGMSBHAK
--TVGGRYGGSBRRGGCA----

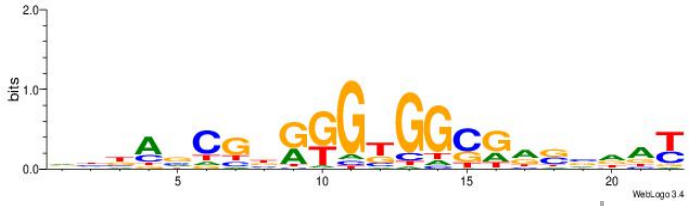
Original motif

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:	2
Number of overlap:	16
Similarity score:	0.0445913

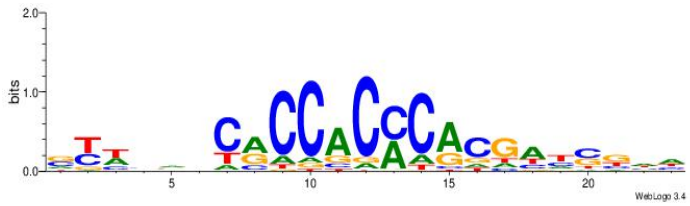
Alignment:
HHBSHTCGTGRGTGGKGDBVWMV
------TVGGRYGGSBRRGGCA-

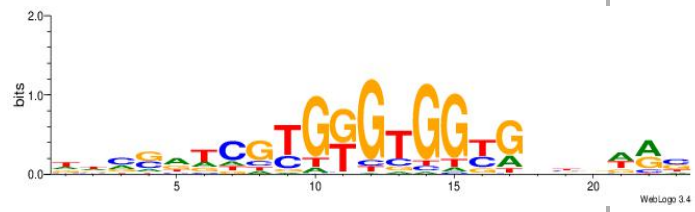
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH

Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV





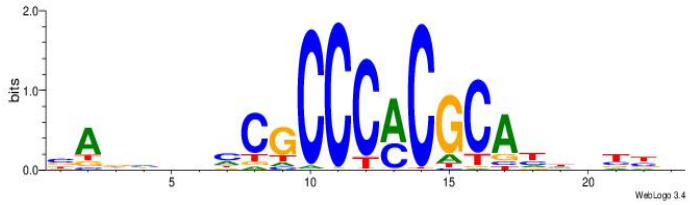
Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	16
Similarity score:	0.0479431

Alignment:

```
BADHBDHCGCCCMCGCAHHDBBV
-TGCCKMBSCCKMCCVA------
```

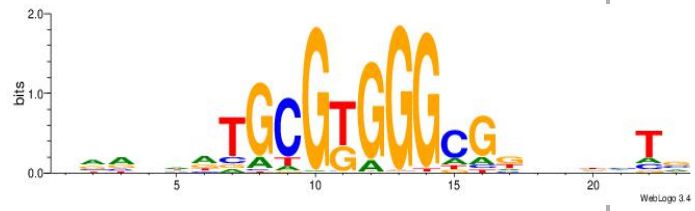
Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif

Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB



Motif ID:	UP00000

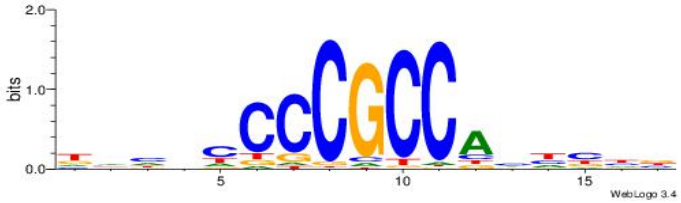
Motif name:	Smad3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	16
Similarity score:	0.0484323

Alignment:

```
BHBHDTGGCGGGGBDHD
TVGGRYGGSBRRGGCA-
```

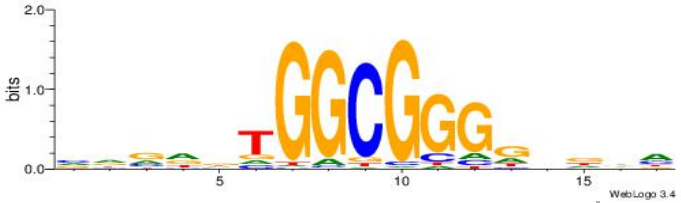
Original motif

Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif

Consensus sequence: BHBHDTGGCGGGGBDHD



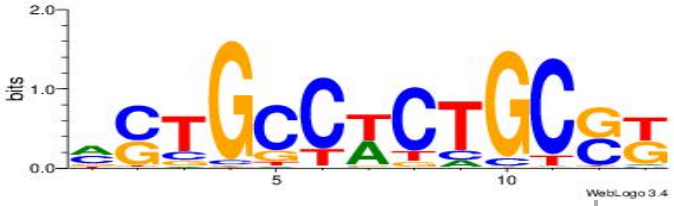
Dataset #: 1 Motif ID: 106 Motif name: C106

Original motif

Consensus sequence: MSGCAGWGGCASK

Reverse complement motif

Consensus sequence: RSTGCCWCTGCSY



Best Matches for Motif ID 106 (Highest to Lowest)

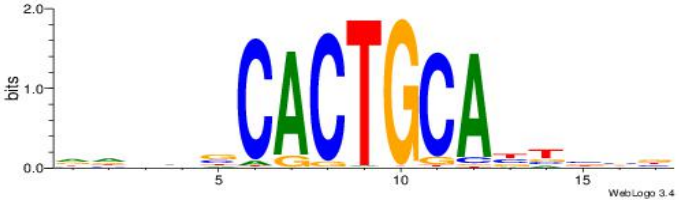
Motif ID:	UP00031
Motif name:	Zbtb3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	13
Similarity score:	0.0221156

Alignment:

```
DDBBBCACTGCABTBBB
RSTGCCWCTGCSY----
```

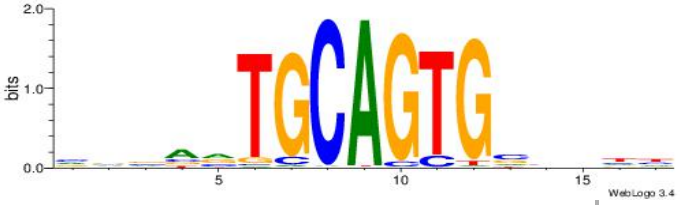
Original motif

Consensus sequence: DDBBBCACTGCABTBBB



Reverse complement motif

Consensus sequence: BBBAVTGCAGTGBBVDD



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:	Backward
Position number:	3
Number of overlap:	13
Similarity score:	0.026668

Alignment:

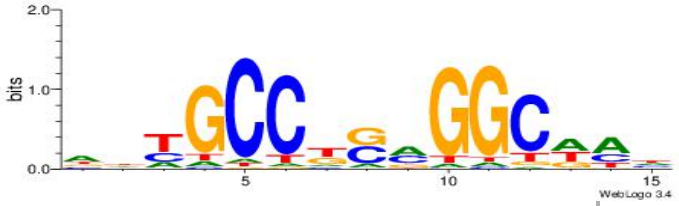
```
HHKGCCYSRGGCWAD
RSTGCCWCTGCSY--
```

Original motif

Consensus sequence: DTWGCCKSMGGCRHH

Reverse complement motif

Consensus sequence: HHKGCCYSRGGCWAD

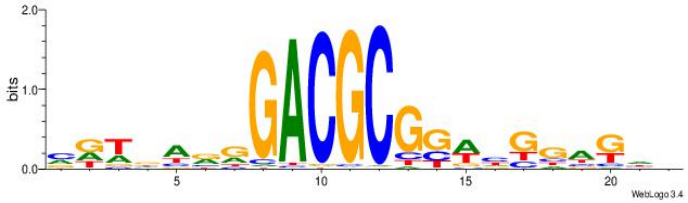


Motif ID:	UP00527
Motif name:	Foxn4_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2

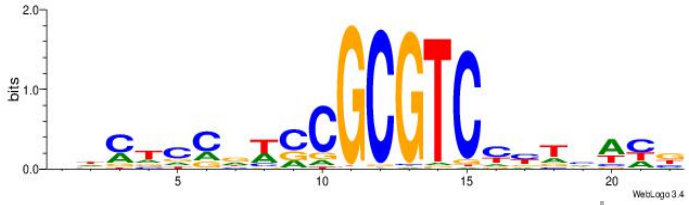
Number of overlap: 13
Similarity score: 0.0273606

Alignment:
VDWDARRGACGCGGWHGGAKHV
--------MSGCAGWGGCASK-

Original motif
Consensus sequence: VDWDARRGACGCGGWHGGAKHV



Reverse complement motif
Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV



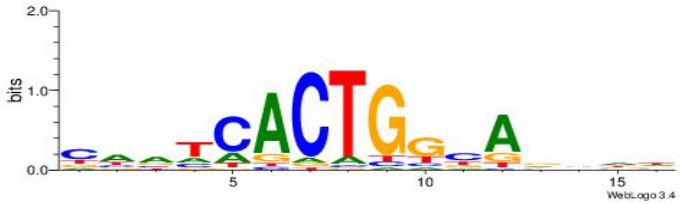
Motif ID: UP00031
Motif name: Zbtb3_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 13
Similarity score: 0.0282689

Alignment:
DDHHTBCCAGTGABHG
--RSTGCCWCTGCSY-

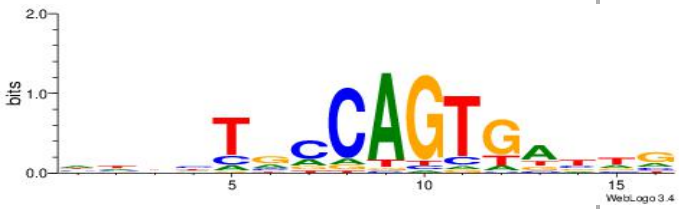
Original motif

Reverse complement motif

Consensus sequence: CHVTCACTGGBADHDD



Consensus sequence: DDHHTBCCAGTGABHG



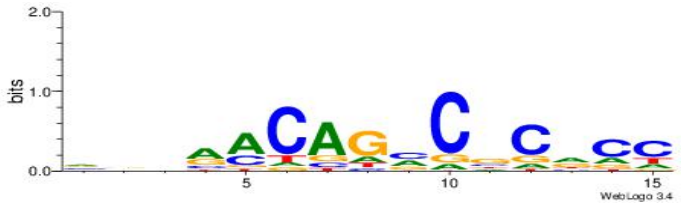
Motif ID:	UP00036
Motif name:	Myf6_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	13
Similarity score:	0.0289018

Alignment:

```
GGDGBGVCTGTKVVB
RSTGCCWCTGCSY--
```

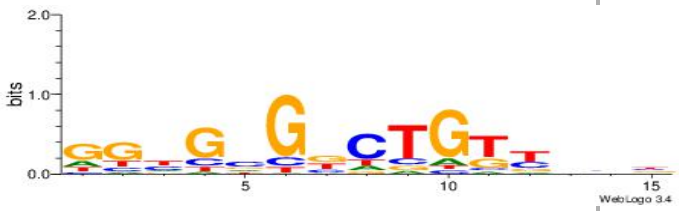
Original motif

Consensus sequence: VVVRACAGVCBCDCC



Reverse complement motif

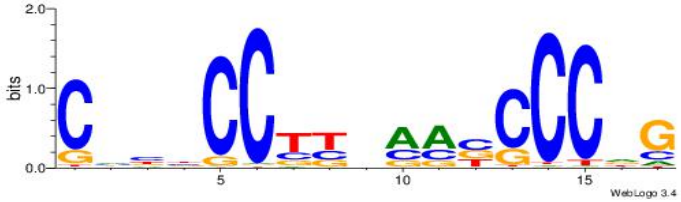
Consensus sequence: GGDGBGVCTGTKVVB



Dataset #: 1 **Motif ID: 107** **Motif name: C107**

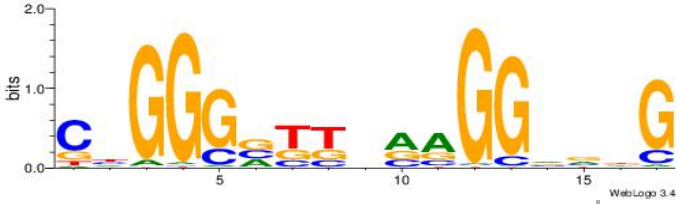
Original motif

Consensus sequence: CHBBCCTYBAABCCCDG



Reverse complement motif

Consensus sequence: CDGGGBTTVMAGGVBHG



Best Matches for Motif ID 107 (Highest to Lowest)

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:	5
Number of overlap:	17
Similarity score:	0.0580885

Alignment:

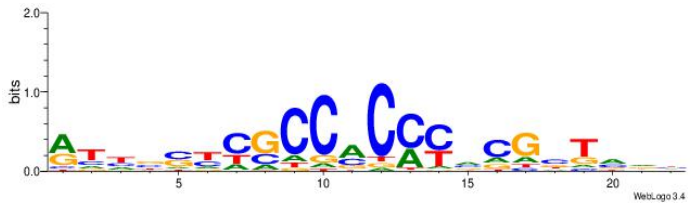
```
HDBABCGBKRGYGGCGMSBHAK
-CDGGGBTTVMAGGVBHG----
```

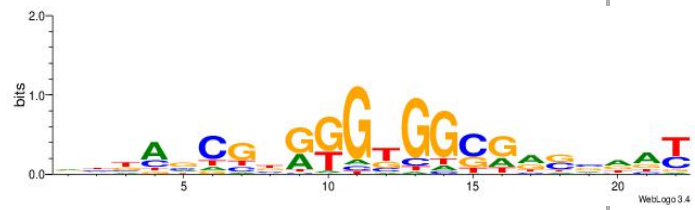
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH

Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK





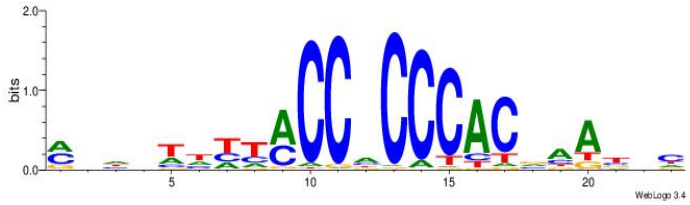
Motif ID:	UP00538
Motif name:	Gli1_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	17
Similarity score:	0.0584165

Alignment:

```
MHHHWHYTMCCHCCCACVAABVH
CHBBCCTYBAABCCCDG------
```

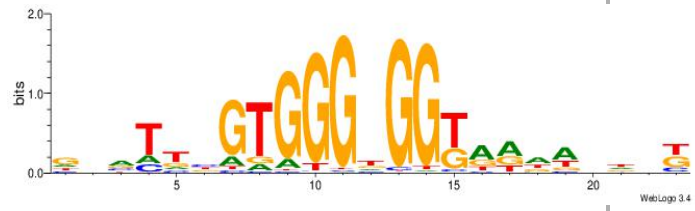
Original motif

Consensus sequence: MHHHWHYTMCCHCCCACVAABVH



Reverse complement motif

Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY



Motif ID:	UP00098

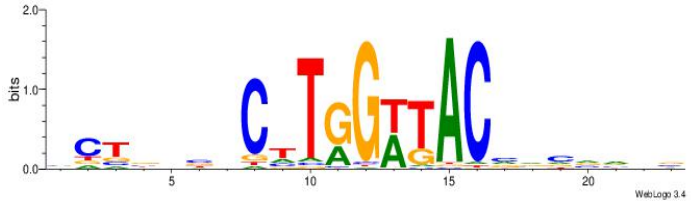
Motif name:	Rfx3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	17
Similarity score:	0.0604761

Alignment:

```
VCTBHBVCTTGGWTACVVVVVDB
--CHBBCCTYBAABCCCDG----
```

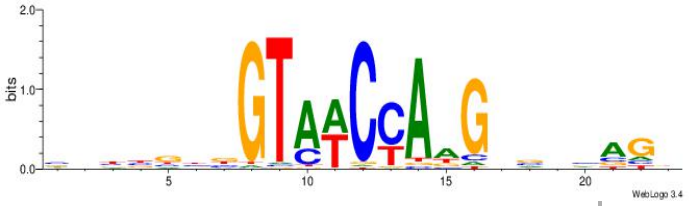
Original motif

Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB



Reverse complement motif

Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB

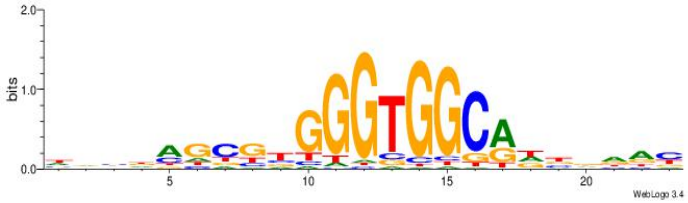


Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	17

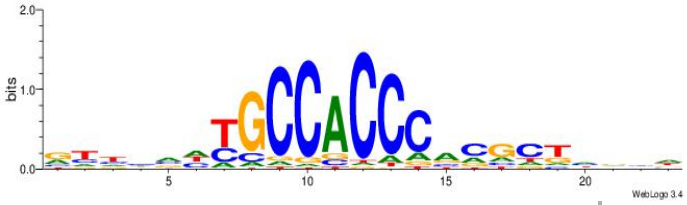
Similarity score: 0.0618639

Alignment:
BDDHVDKGCCACCCVCGCTDBVH
----CHBBCCTYBAABCCCDG--

Original motif
Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH

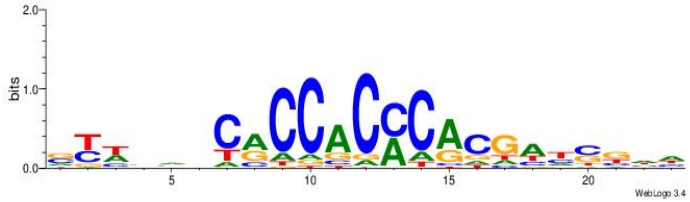


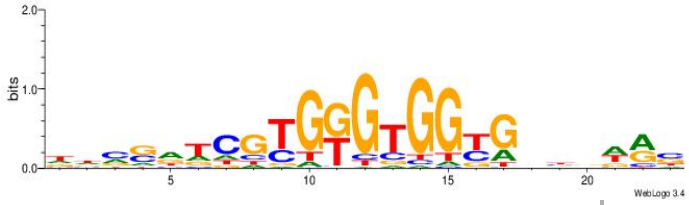
Motif ID: UP00540
Motif name: Gli3_v016060_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 5
Number of overlap: 17
Similarity score: 0.0669075

Alignment:
VYWVVHCRCCACMCACGAHSBHH
----CHBBCCTYBAABCCCDG--

Original motif
Consensus sequence: VYWVVHCRCCACMCACGAHSBHH

Reverse complement motif
Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV

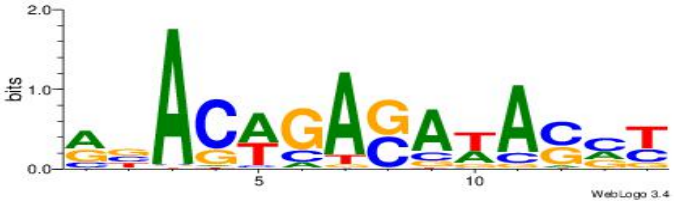




Dataset #: 1 **Motif ID: 108** **Motif name: C108**

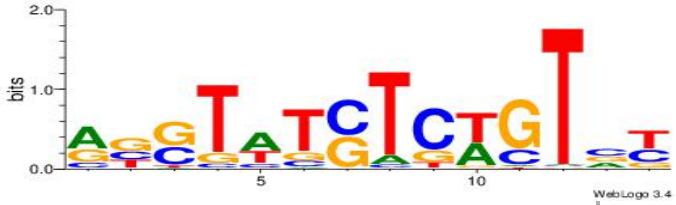
Original motif

Consensus sequence: RBACWGASAWASVY



Reverse complement motif

Consensus sequence: MVSTWTSTCWGTBK



Best Matches for Motif ID 108 (Highest to Lowest)

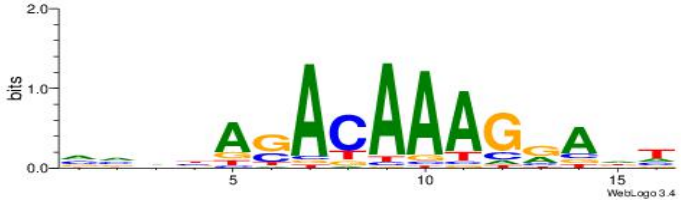
Motif ID:	UP00101
Motif name:	Sox12_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0263171

Alignment:

```
HDTMCTTTGTSTVDBB
--MVSTWTSTCWGTBK
```

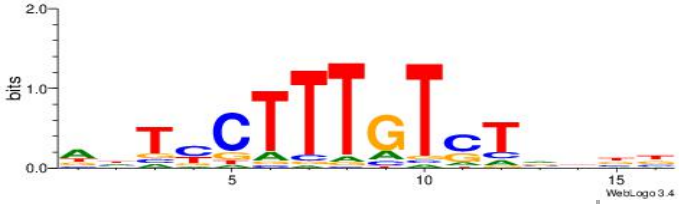
Original motif

Consensus sequence: VVDBASACAAAGRADH



Reverse complement motif

Consensus sequence: HDTMCTTTGTSTVDBB



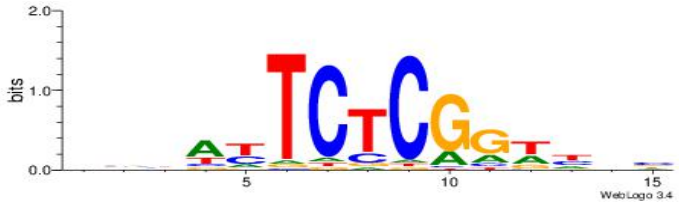
Motif ID:	UP00018
Motif name:	Irf4_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0315601

Alignment:

```
BHHWCCGAGAMTVVB
MVSTWTSTCWGTBK-
```

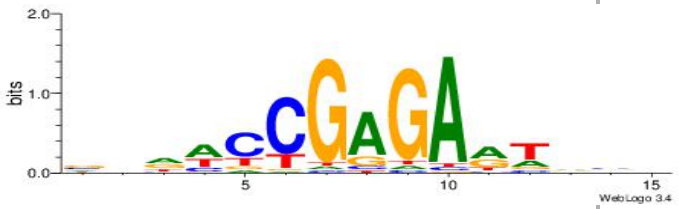
Original motif

Consensus sequence: VVBAYTCTCGGWHDB



Reverse complement motif

Consensus sequence: BHHWCCGAGAMTVVB



Motif ID:	>UP00011
Motif name:	Irf6_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:	0.0320561

Alignment:

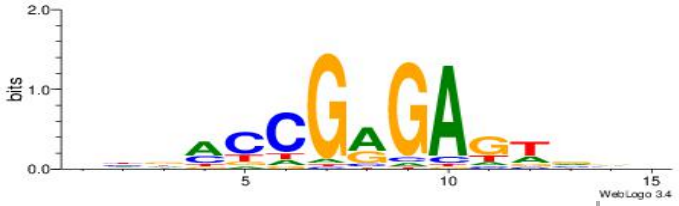
```
VDDRCCGMGAGTBBB
-RBACWGASAWASVY
```

Original motif

Consensus sequence: VBBACTCYCGGKHDV

Reverse complement motif

Consensus sequence: VDDRCCGMGAGTBBB

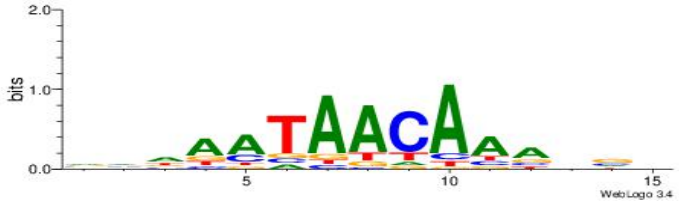


Motif ID:	UP00073
Motif name:	Foxa2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1

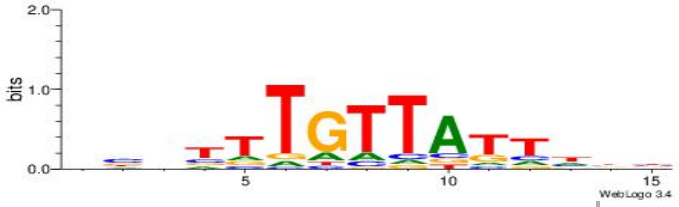
Number of overlap: 14
Similarity score: 0.0348659

Alignment:
VVDAATAACAAAVVB
-RBACWGASAWASVY

Original motif
Consensus sequence: VVDAATAACAAAVVB



Reverse complement motif
Consensus sequence: BVVTTTGTTATTDBB



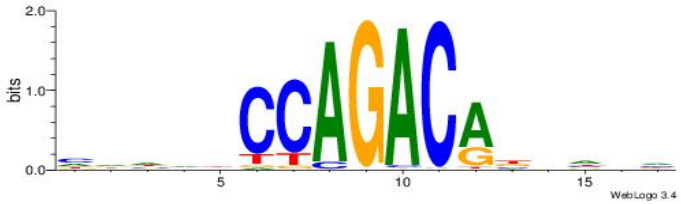
Motif ID: UP00000
Motif name: Smad3_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 4
Number of overlap: 14
Similarity score: 0.0352792

Alignment:
HVHBVTGTCTGGDDHDD
MVSTWTSTCWGTBK---

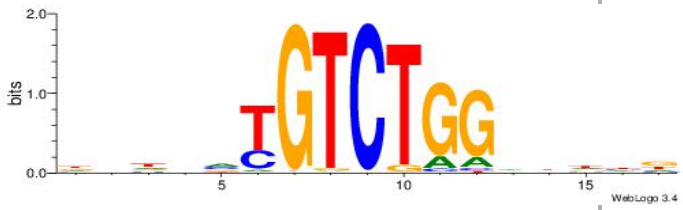
Original motif

Reverse complement motif

Consensus sequence: HDHDDCCAGACABBHVH



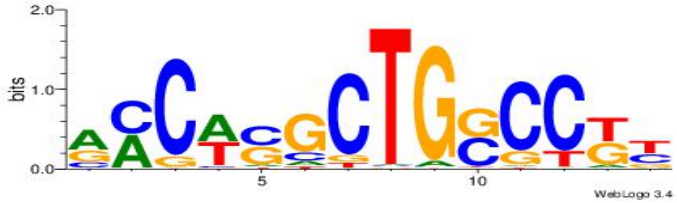
Consensus sequence: HVHBVTGTCTGGDDHDD



Dataset #: 1 Motif ID: 109 Motif name: C109

Original motif

Consensus sequence: RMCWSGCTGSCCKY



Reverse complement motif

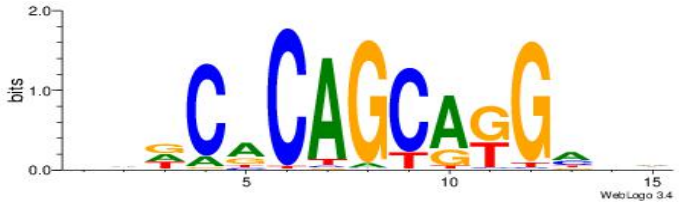
Consensus sequence: MRGGSCAGCSWGRK

Best Matches for Motif ID 109 (Highest to Lowest)

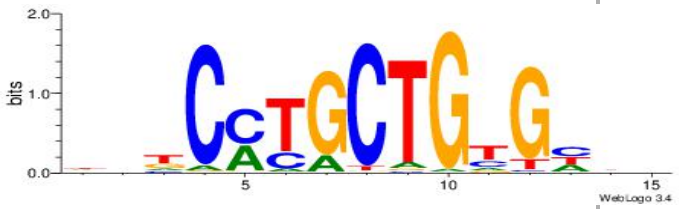
Motif ID:	UP00006
Motif name:	Zic3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0232278

Alignment:
DDDCACAGCAKGHVD
MRGGSCAGCSWGRK-

Original motif
Consensus sequence: DDDCACAGCAKGHVD



Reverse complement motif
Consensus sequence: DVHCYTGCTGTGHDH

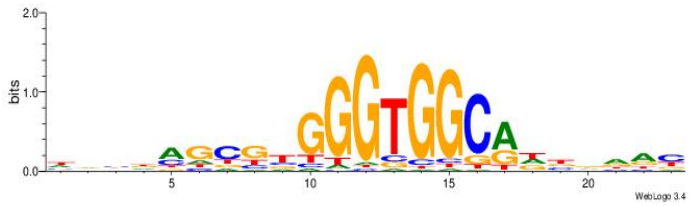


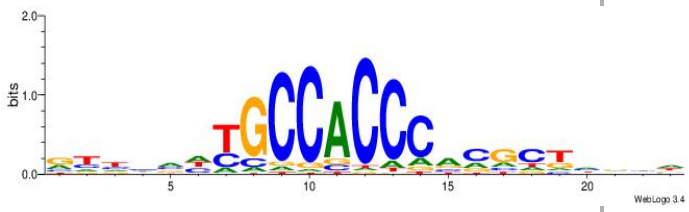
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	14
Similarity score:	0.0232672

Alignment:
BDDHVDKGCCACCCVCGCTDBVH
----MRGGSCAGCSWGRK-----

Original motif
Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB

Reverse complement motif
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH





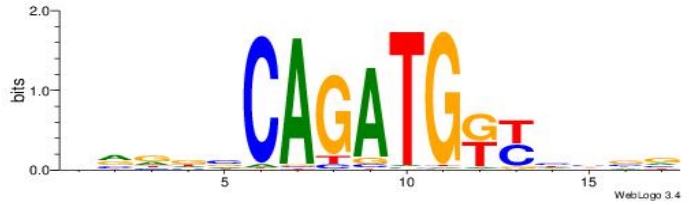
Motif ID:	UP00046
Motif name:	Tcfe2a_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	14
Similarity score:	0.0233983

Alignment:

```
VBBDMYCATCTGVHHBH
---RMCWSGCTGSCCKY
```

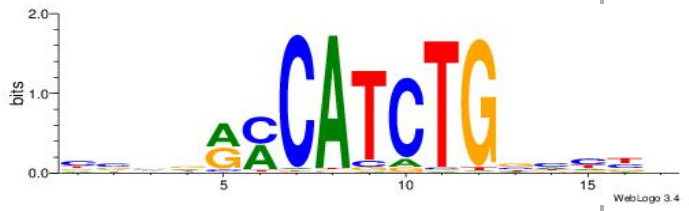
Original motif

Consensus sequence: HVDDVCAGATGKYHBBV



Reverse complement motif

Consensus sequence: VBBDMYCATCTGVHHBH



Motif ID:	UP00539

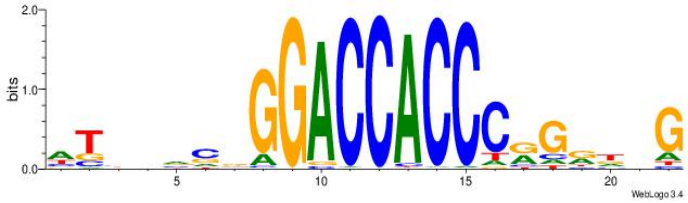
Motif name:	Gli2_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	14
Similarity score:	0.0243539

Alignment:

```
HTBVVVDGGACCACCCRGRDBG
------MRGGSCAGCSWGRK--
```

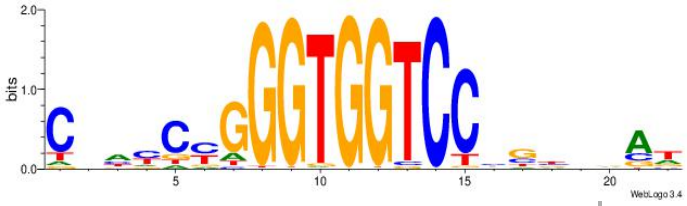
Original motif

Consensus sequence: HTBVVVDGGACCACCCRGRDBG



Reverse complement motif

Consensus sequence: CBDMCMGGGTGGTCCHVBVBAH

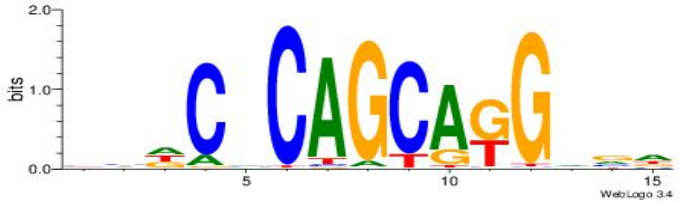


Motif ID:	UP00057
Motif name:	Zic2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	14

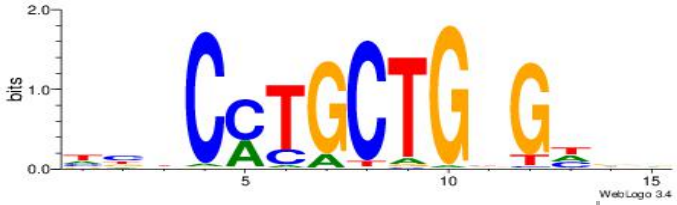
Similarity score: 0.024667

Alignment:
HHDCVCAGCAKGVVD
MRGGSCAGCSWGRK-

Original motif
Consensus sequence: HHDCVCAGCAKGVVD

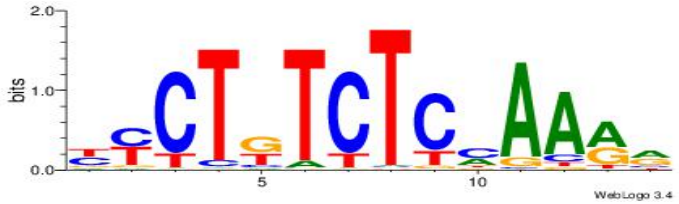


Reverse complement motif
Consensus sequence: DVBCYTGCTGBGDDD



Dataset #: 1 Motif ID: 110 Motif name: C110

Original motif
Consensus sequence: YYCTKTCTCMAARR



Reverse complement motif
Consensus sequence: KKTTRGAGAYAGKM

Best Matches for Motif ID 110 (Highest to Lowest)

Motif ID:	UP00032
Motif name:	Gata3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement

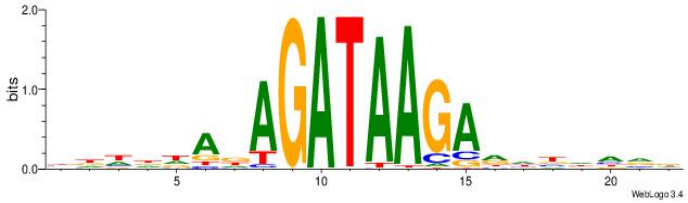
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	8
Number of overlap:	14
Similarity score:	0.030626

Alignment:

```
BDHDDADAGATAAGADHBDHVD
-KKTTRGAGAYAGKM-------
```

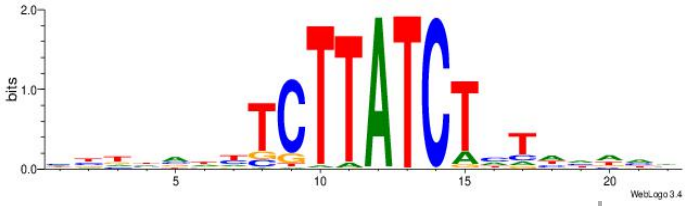
Original motif

Consensus sequence: BDHDDADAGATAAGADHBDHVD



Reverse complement motif

Consensus sequence: HBHDVHDTCTTATCTHTDDHDV

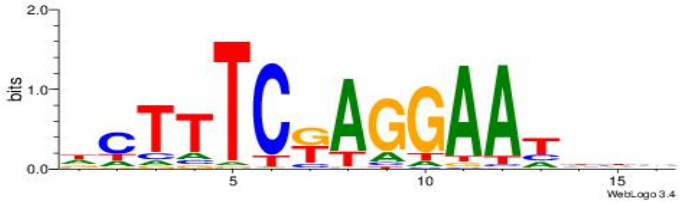


Motif ID:	UP00043
Motif name:	Bcl6b_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0328671

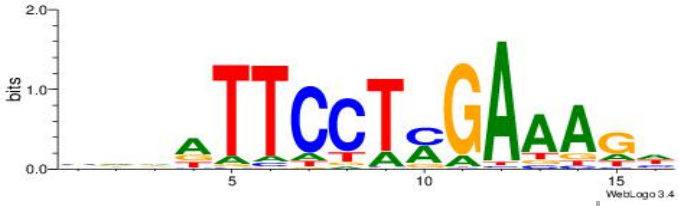
Alignment:

VHHATTCCTYGAAAGD
-YYCTKTCTCMAARR-

Original motif
Consensus sequence: DCTTTCKAGGAATHHV



Reverse complement motif
Consensus sequence: VHHATTCCTYGAAAGD

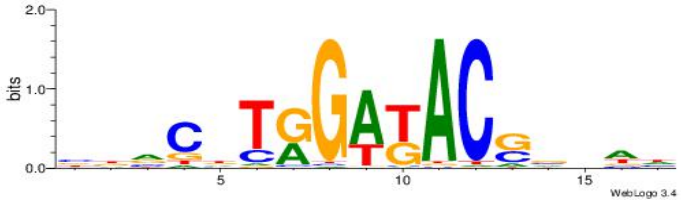


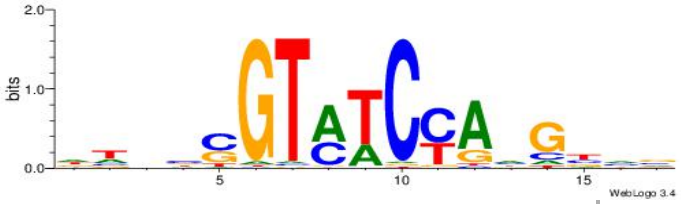
Motif ID:	UP00076
Motif name:	Rfxdc2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	14
Similarity score:	0.0362358

Alignment:
BBVCDTRGAKACSVDDH
--KKTTRGAGAYAGKM-

Original motif
Consensus sequence: BBVCDTRGAKACSVDDH

Reverse complement motif
Consensus sequence: HDDVSGTRTCMADGBVB





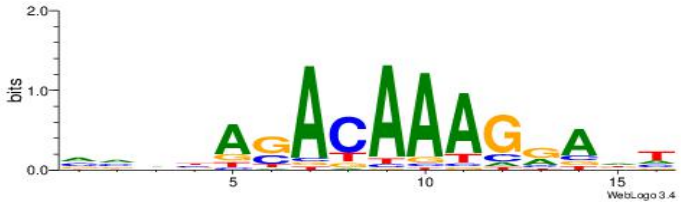
Motif ID:	UP00101
Motif name:	Sox12_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	14
Similarity score:	0.0396775

Alignment:

```
HDTMCTTTGTSTVDBB
--YYCTKTCTCMAARR
```

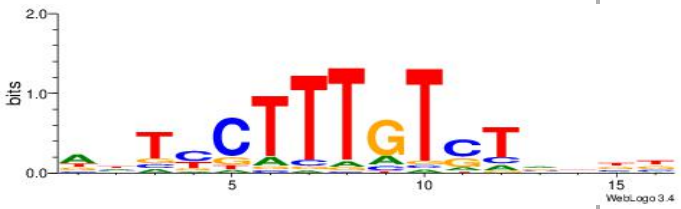
Original motif

Consensus sequence: VVDBASACAAAGRADH



Reverse complement motif

Consensus sequence: HDTMCTTTGTSTVDBB



Motif ID:	UP00032

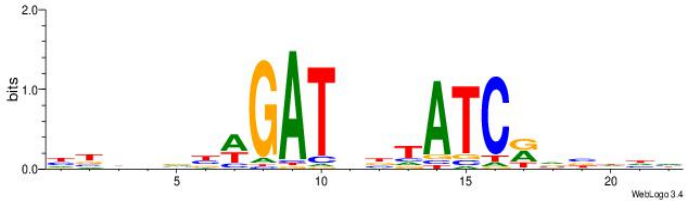
Motif name:	Gata3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0396815

Alignment:

```
HBHDVBWGATHBTATCRVBHHH
KKTTRGAGAYAGKM--------
```

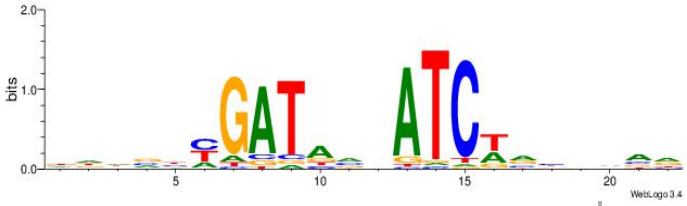
Original motif

Consensus sequence: HBHDVBWGATHBTATCRVBHHH



Reverse complement motif

Consensus sequence: HHHBBMGATAVHATCWVVDHVH



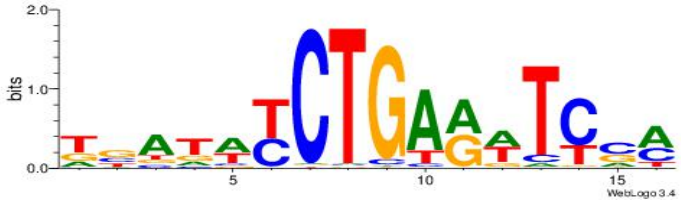
Dataset #: 1 Motif ID: 111 Motif name: C111

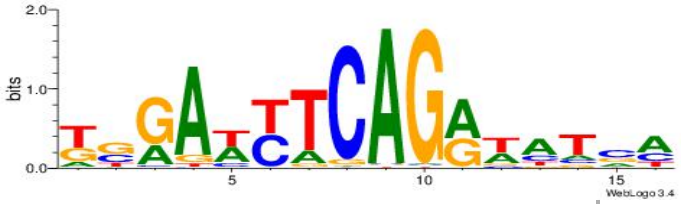
Original motif

Consensus sequence: TBATWYCTGARWTCSM

Reverse complement motif

Consensus sequence: YSGAWKTCAGMWATBA





Best Matches for Motif ID 111 (Highest to Lowest)

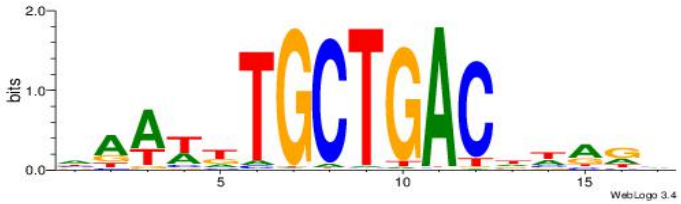
Motif ID:	UP00045
Motif name:	Mafb_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	16
Similarity score:	0.0382144

Alignment:

```
DMTWDGTCAGCADWTTH
YSGAWKTCAGMWATBA-
```

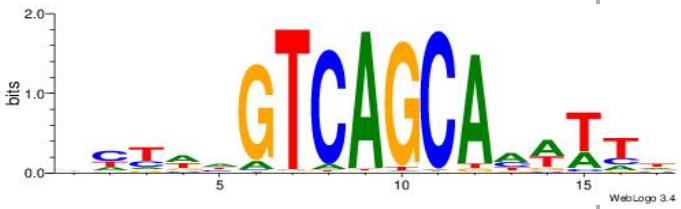
Original motif

Consensus sequence: HAAWDTGCTGACDWARH



Reverse complement motif

Consensus sequence: DMTWDGTCAGCADWTTH



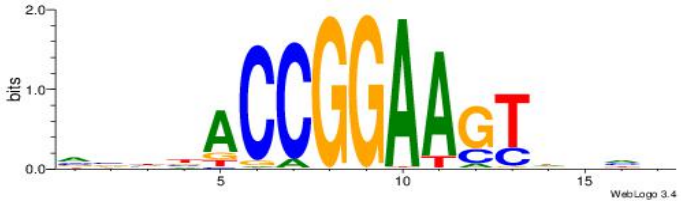
Motif ID:	UP00410
Motif name:	Elk1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	16
Similarity score:	0.0436521

Alignment:

```
VVHBACCGGAAGTDBHD
TBATWYCTGARWTCSM-
```

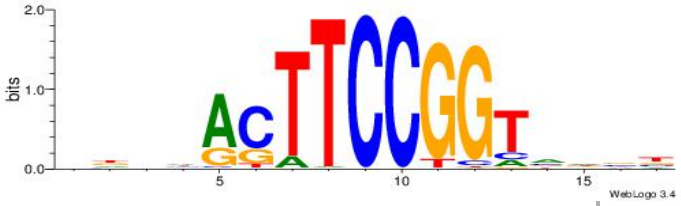
Original motif

Consensus sequence: VVHBACCGGAAGTDBHD



Reverse complement motif

Consensus sequence: DHBDACTTCCGGTVHVB

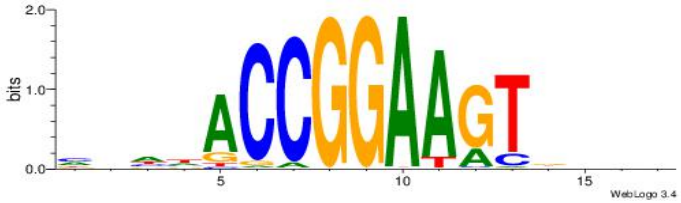


Motif ID:	UP00013
Motif name:	Gabpa_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2

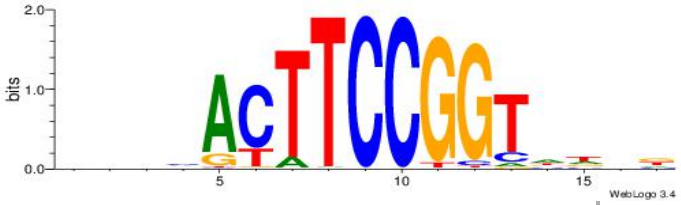
Number of overlap: 16
Similarity score: 0.0439267

Alignment:
HVHHACCGGAAGTDHHV
TBATWYCTGARWTCSM-

Original motif
Consensus sequence: HVHHACCGGAAGTDHHV



Reverse complement motif
Consensus sequence: BHHHACTTCCGGTHHBD



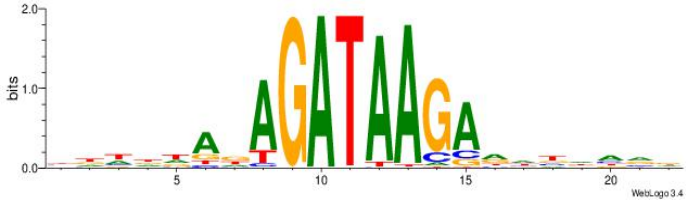
Motif ID: UP00032
Motif name: Gata3_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 3
Number of overlap: 16
Similarity score: 0.0485736

Alignment:
BDHDDADAGATAAGADHBDHVD
----YSGAWKTCAGMWATBA--

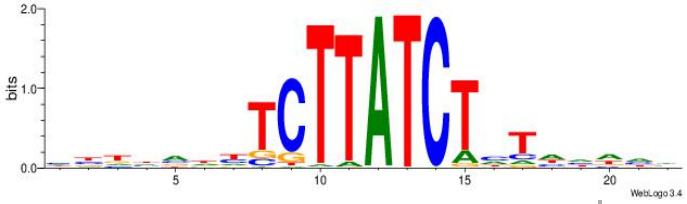
Original motif

Reverse complement motif

Consensus sequence: BDHDDADAGATAAGADHBDHVD



Consensus sequence: HBHDVHDTCTTATCTHTDDHDV



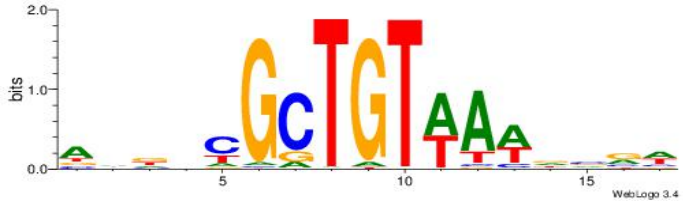
Motif ID:	UP00193
Motif name:	Rhox11_1765.2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	16
Similarity score:	0.0486964

Alignment:

```
WVVHWTWACAGCGBHBT
-YSGAWKTCAGMWATBA
```

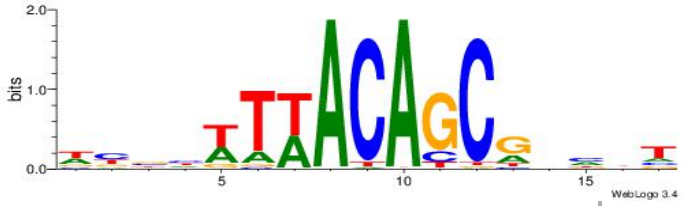
Original motif

Consensus sequence: AVDVCGCTGTWAWDVVW



Reverse complement motif

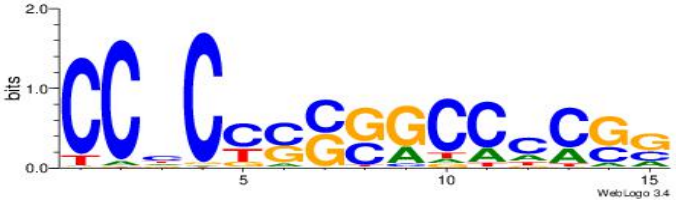
Consensus sequence: WVVHWTWACAGCGBHBT



Dataset #: 1 **Motif ID: 112** **Motif name: C112**

Original motif

Consensus sequence: CCBCYSSSGCCCCSS



Reverse complement motif

Consensus sequence: SSGGGGCSSSKGBGG

Best Matches for Motif ID 112 (Highest to Lowest)

Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	9
Number of overlap:	15
Similarity score:	0.0368115

Alignment:

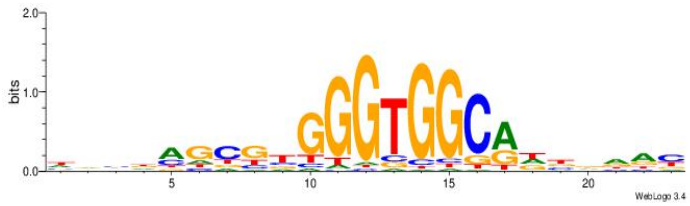
```
HVBDAGCGBGGGTGGCRDBDDDB
SSGGGGCSSSKGBGG--------
```

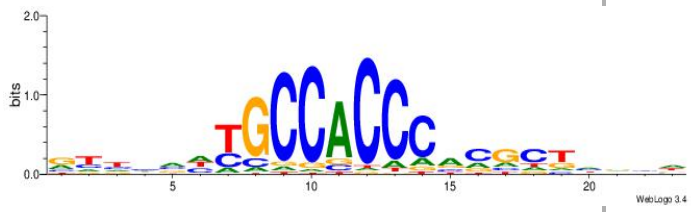
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB

Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH





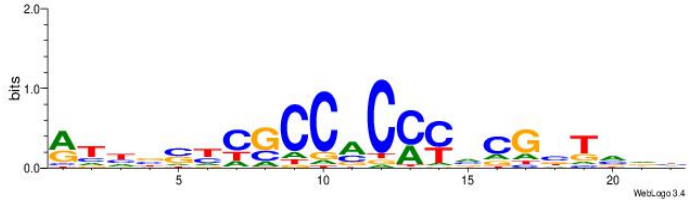
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	15
Similarity score:	0.038423

Alignment:

```
RTHBSYCGCCMCMYVCGBTVDH
--CCBCYSSSGCCCCSS-----
```

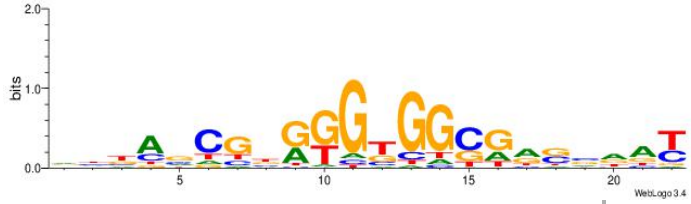
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



Motif ID:	UP00033

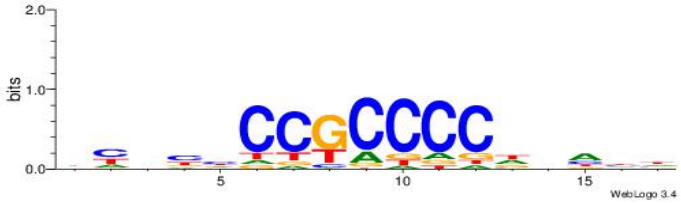
Motif name:	Zfp410_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	15
Similarity score:	0.0430481

Alignment:

```
HHHHDGGGGCGGDBHDV
--SSGGGGCSSSKGBGG
```

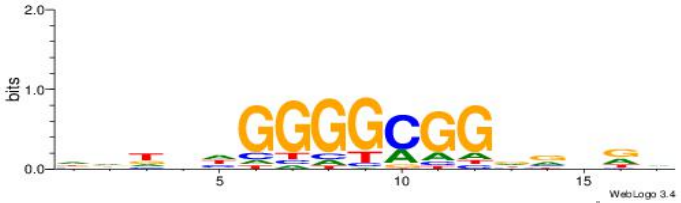
Original motif

Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif

Consensus sequence: HHHHDGGGGCGGDBHDV

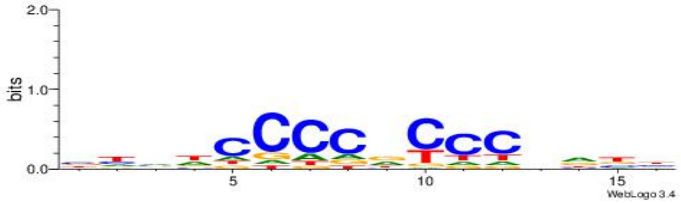


Motif ID:	UP00099
Motif name:	Ascl2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	15

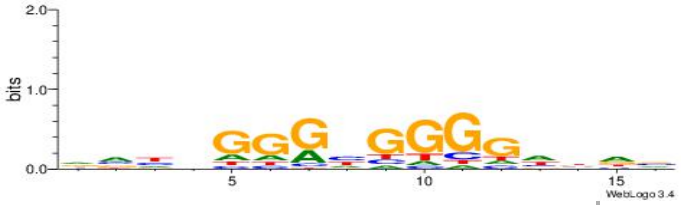
Similarity score: 0.0450061

Alignment:
BHVDCCCCDCCCBDBH
CCBCYSSSGCCCCSS-

Original motif
Consensus sequence: BHVDCCCCDCCCBDBH



Reverse complement motif
Consensus sequence: HVDVGGGHGGGGDBHB

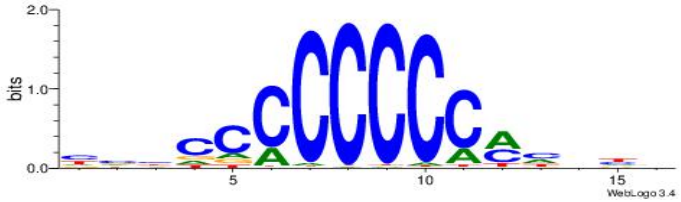


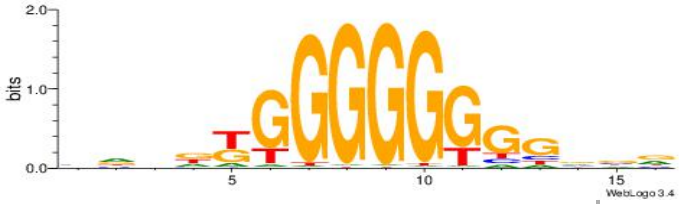
Motif ID: UP00022
Motif name: Zfp740_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 15
Similarity score: 0.0460082

Alignment:
HVBCCCCCCCCMHHHB
CCBCYSSSGCCCCSS-

Original motif
Consensus sequence: HVBCCCCCCCCMHHHB

Reverse complement motif
Consensus sequence: BHHDYGGGGGGGGBVD

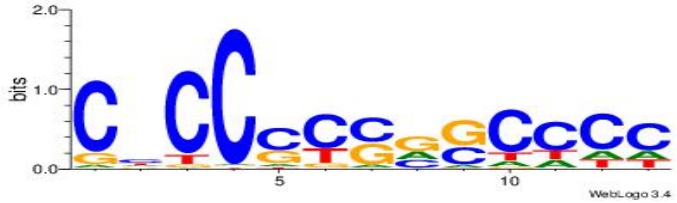




Dataset #: 1 Motif ID: 113 Motif name: C113

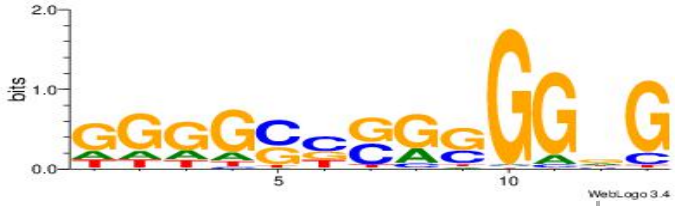
Original motif

Consensus sequence: CHCCSCSVSCCCC



Reverse complement motif

Consensus sequence: GGGGSVSGSGGDG



Best Matches for Motif ID 113 (Highest to Lowest)

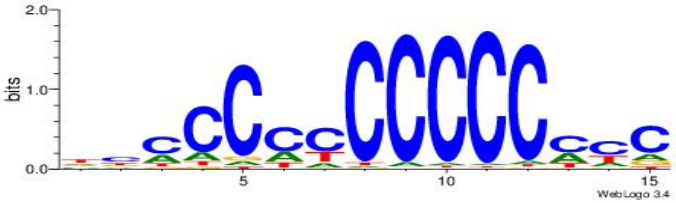
Motif ID:	UP00021
Motif name:	Zfp281_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	13
Similarity score:	0.0317901

Alignment:

DBCCCCCCCCCCMYC
-CHCCSCSVSCCCC-

Original motif

Consensus sequence: DBCCCCCCCCCCMYC



Reverse complement motif

Consensus sequence: GKRGGGGGGGGGBD

Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	13
Similarity score:	0.0384426

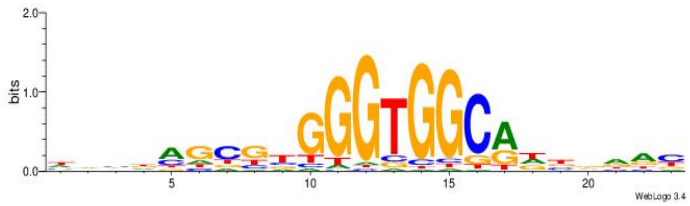
Alignment:
HVBDAGCGBGGGTGGCRDBDDDB
-GGGGSVSGSGGDG---------

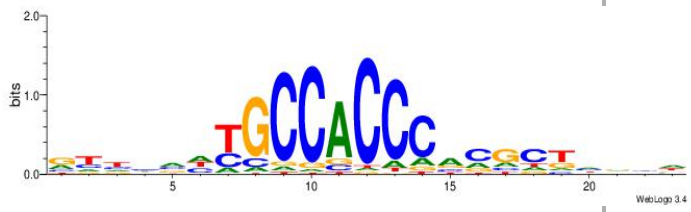
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB

Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH





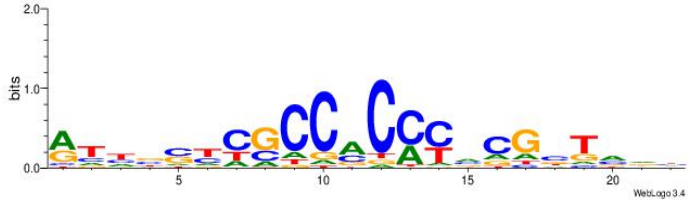
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	13
Similarity score:	0.0386858

Alignment:

```
HDBABCGBKRGYGGCGMSBHAK
GGGGSVSGSGGDG---------
```

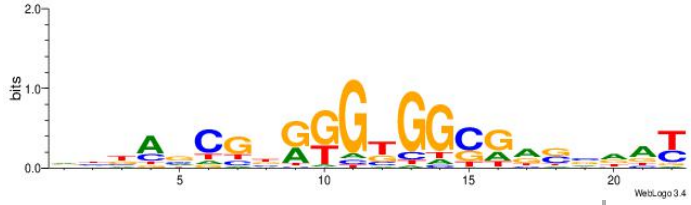
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



Motif ID:	UP00538
Motif name:	Gli1_v015681_secondary

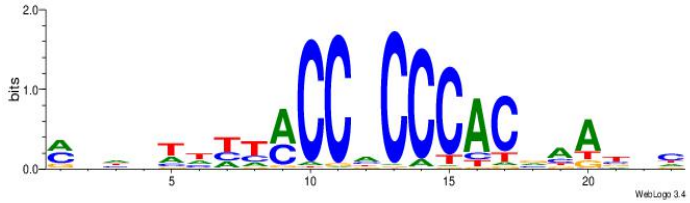
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	11
Number of overlap:	13
Similarity score:	0.0387928

Alignment:

```
DVVTTVGTGGGHGGYAMHWHHHY
GGGGSVSGSGGDG----------
```

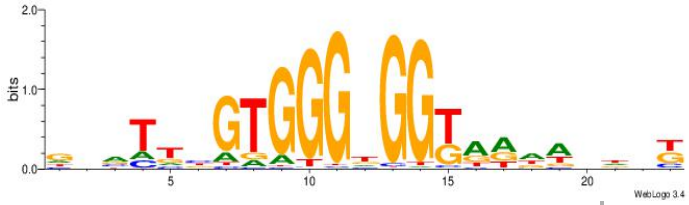
Original motif

Consensus sequence: MHHHWHYTMCCHCCCACVAABVH



Reverse complement motif

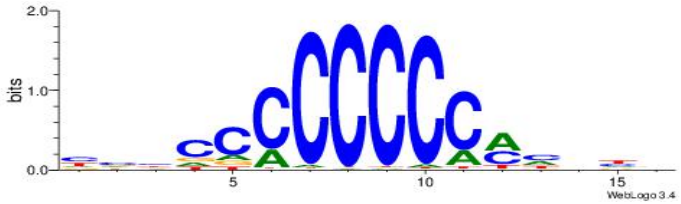
Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY



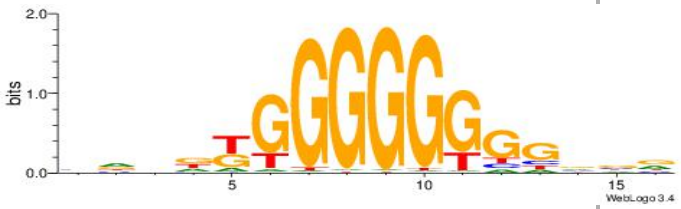
Motif ID:	UP00022
Motif name:	Zfp740_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	13
Similarity score:	0.0424015

Alignment:
HVBCCCCCCCCMHHHB
---CHCCSCSVSCCCC

Original motif
Consensus sequence: HVBCCCCCCCCMHHHB

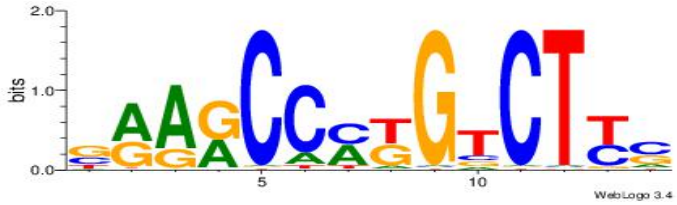


Reverse complement motif
Consensus sequence: BHHDYGGGGGGGGBVD

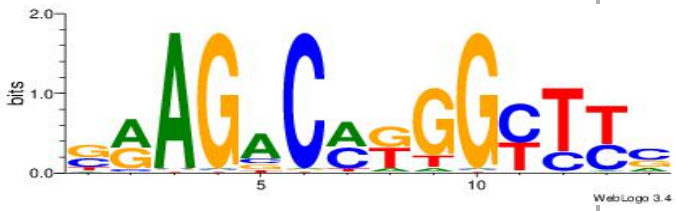


Dataset #: 1 Motif ID: 114 Motif name: C114

Original motif
Consensus sequence: SRARCCMKGTCTYS



Reverse complement motif
Consensus sequence: SMAGACRRGGMTKS



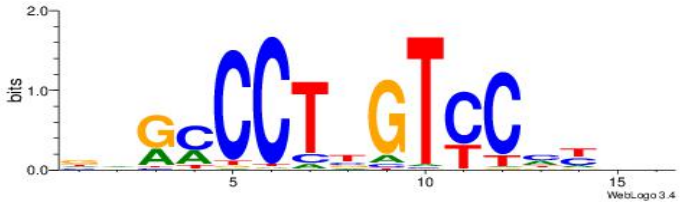
Best Matches for Motif ID 114 (Highest to Lowest)

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

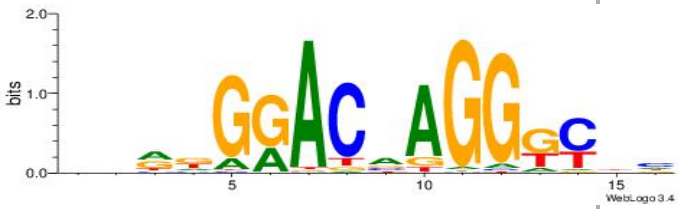
Position number: 1
Number of overlap: 14
Similarity score: 0.0219685

Alignment:
DDGMCCTBGTCCHYHV
SRARCCMKGTCTYS--

Original motif
Consensus sequence: DDGMCCTBGTCCHYHV



Reverse complement motif
Consensus sequence: VHMDGGACVAGGRCDH

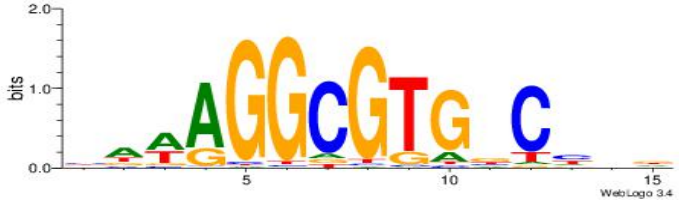


Motif ID: UP00002
Motif name: Sp4_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 2
Number of overlap: 14
Similarity score: 0.0320328

Alignment:
BDWAGGCGTGBCHHD
-SMAGACRRGGMTKS

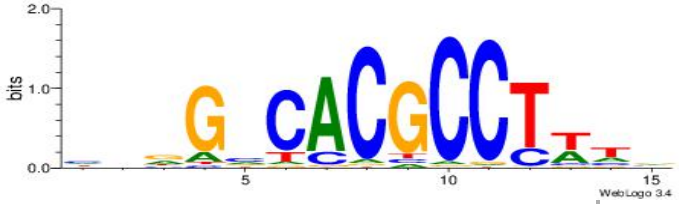
Original motif

Consensus sequence: BDWAGGCGTGBCHHD



Reverse complement motif

Consensus sequence: HHDGBCACGCCTWDB



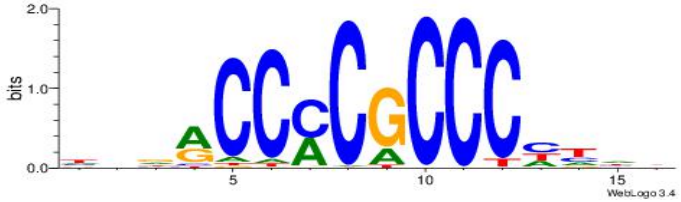
Motif ID:	UP00093
Motif name:	Klf7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	14
Similarity score:	0.0320453

Alignment:

```
HBDRCCMCGCCCHHHD
SRARCCMKGTCTYS--
```

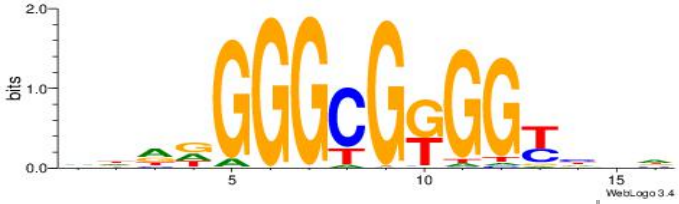
Original motif

Consensus sequence: HBDRCCMCGCCCHHHD



Reverse complement motif

Consensus sequence: DHHDGGGCGRGGKHBH



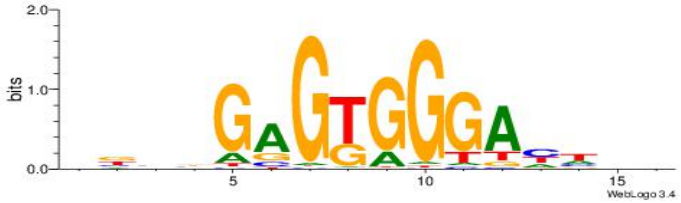
Motif ID:	UP00007
Motif name:	Egr1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0338574

Alignment:

```
BBHBGAGTGGGAHHDB
-SMAGACRRGGMTKS-
```

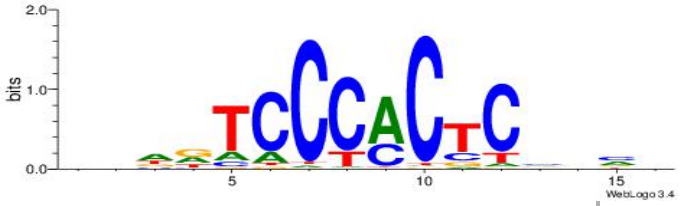
Original motif

Consensus sequence: BBHBGAGTGGGAHHDB



Reverse complement motif

Consensus sequence: BHHDTCCCACTCBDBV

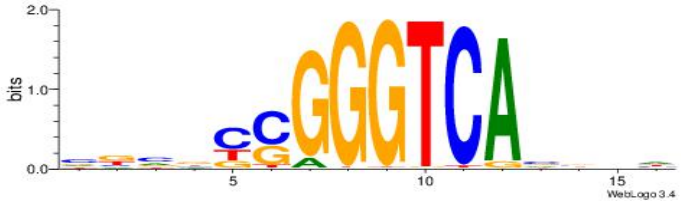


Motif ID:	UP00009
Motif name:	Nr2f2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward

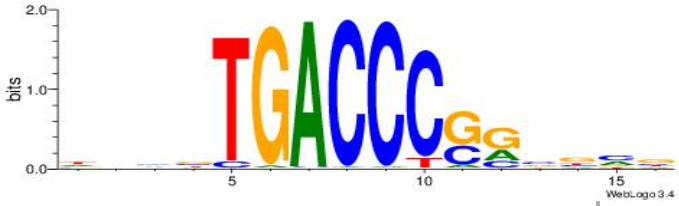
Position number:	3
Number of overlap:	14
Similarity score:	0.0350465

Alignment:
VBVBCSGGGTCAVBBH
SRARCCMKGTCTYS--

Original motif
Consensus sequence: VBVBCSGGGTCAVBBH

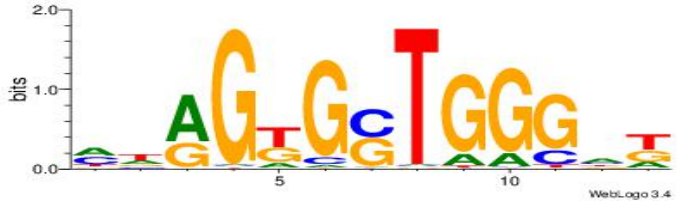


Reverse complement motif
Consensus sequence: HVBVTGACCCSGBVBV

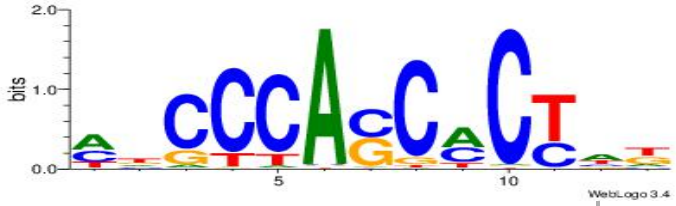


Dataset #: 1 Motif ID: 115 Motif name: C115

Original motif
Consensus sequence: MDRGKGSTGGGHK



Reverse complement motif
Consensus sequence: RHCCCASCRCKDY



Best Matches for Motif ID 115 (Highest to Lowest)

Motif ID:	UP00099
Motif name:	Ascl2_secondary

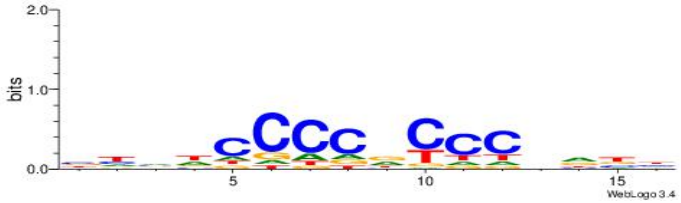
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	13
Similarity score:	0.0107043

Alignment:

```
HVDVGGGHGGGGDBHB
-MDRGKGSTGGGHK--
```

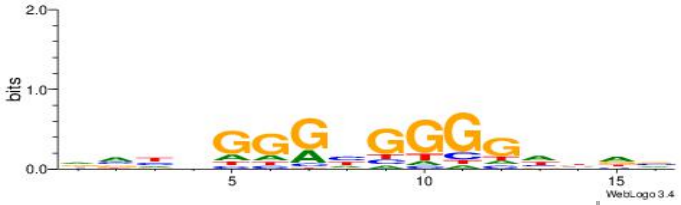
Original motif

Consensus sequence: BHVDCCCCDCCCBDBH



Reverse complement motif

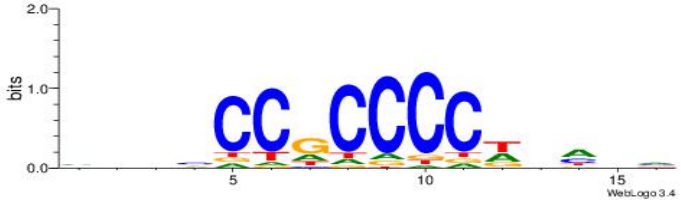
Consensus sequence: HVDVGGGHGGGGDBHB



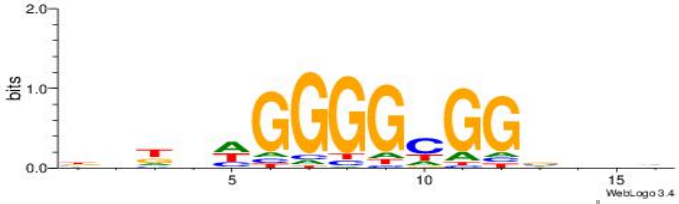
Motif ID:	UP00043
Motif name:	Bcl6b_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	13
Similarity score:	0.0119418

Alignment:
BHHHWGGGGCGGBBVH
--MDRGKGSTGGGHK-

Original motif
Consensus sequence: HBBBCCGCCCCWHHHV



Reverse complement motif
Consensus sequence: BHHHWGGGGCGGBBVH

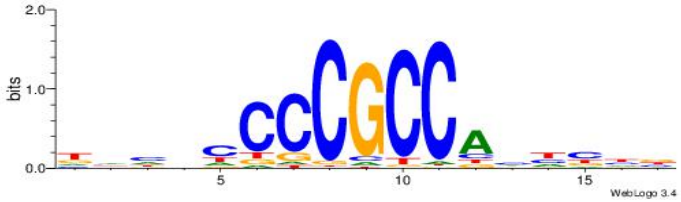


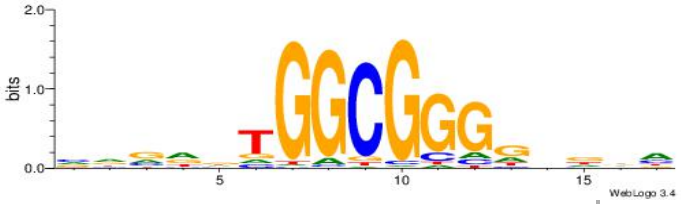
Motif ID:	UP00000
Motif name:	Smad3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	13
Similarity score:	0.0142708

Alignment:
DHHBCCCCGCCAHHBHB
---RHCCCASCRCKDY-

Original motif
Consensus sequence: DHHBCCCCGCCAHHBHB

Reverse complement motif
Consensus sequence: BHBHDTGGCGGGGBDHD





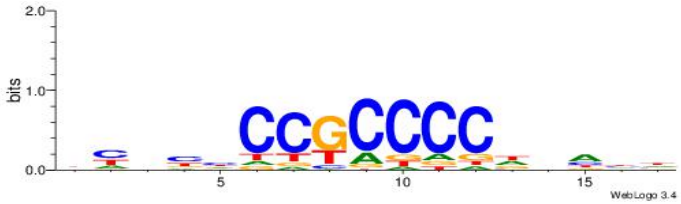
Motif ID:	UP00033
Motif name:	Zfp410_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	13
Similarity score:	0.0145702

Alignment:

```
HHHHDGGGGCGGDBHDV
--MDRGKGSTGGGHK--
```

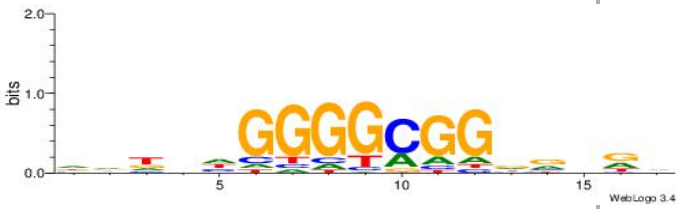
Original motif

Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif

Consensus sequence: HHHHDGGGGCGGDBHDV



Motif ID:	UP00002

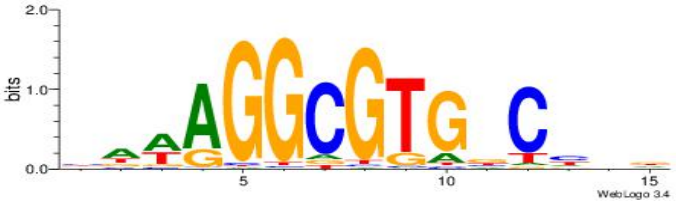
Motif name:	Sp4_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	13
Similarity score:	0.0200599

Alignment:

```
BDWAGGCGTGBCHHD
-MDRGKGSTGGGHK-
```

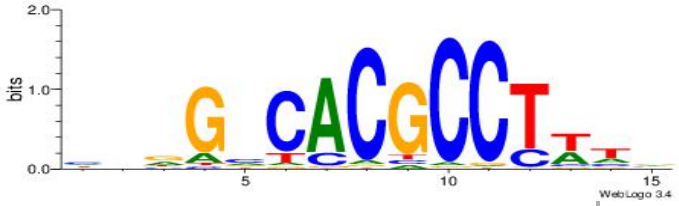
Original motif

Consensus sequence: BDWAGGCGTGBCHHD



Reverse complement motif

Consensus sequence: HHDGBCACGCCTWDB



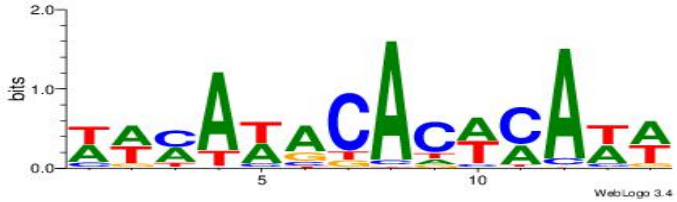
Dataset #: 1 Motif ID: 116 Motif name: C116

Original motif

Consensus sequence: WWMAWACACWMAWW

Reverse complement motif

Consensus sequence: WWTRWGTGTWTRWW



Best Matches for Motif ID 116 (Highest to Lowest)

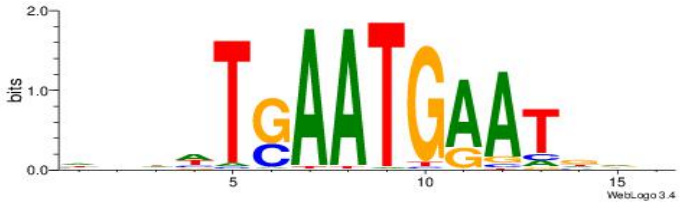
Motif ID:	UP00055
Motif name:	Hbp1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0242601

Alignment:

```
VDHATTCATTSAWDDH
WWMAWACACWMAWW--
```

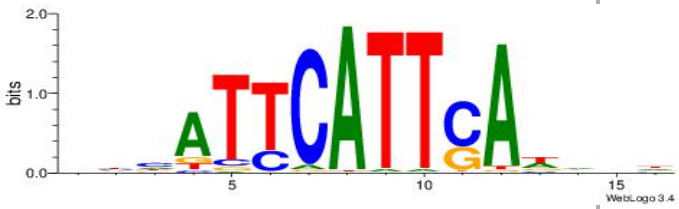
Original motif

Consensus sequence: HHDWTSAATGAATDDB



Reverse complement motif

Consensus sequence: VDHATTCATTSAWDDH



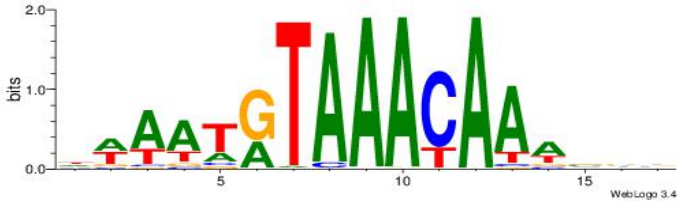
Motif ID:	UP00061
Motif name:	Foxl1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.02629

Alignment:

```
DWAATRTAAACAAWVVB
WWMAWACACWMAWW---
```

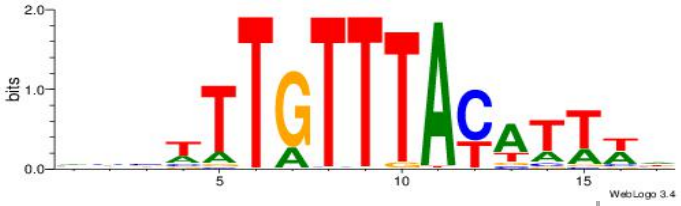
Original motif

Consensus sequence: DWAATRTAAACAAWVVB



Reverse complement motif

Consensus sequence: VVVWTTGTTTAMATTWD

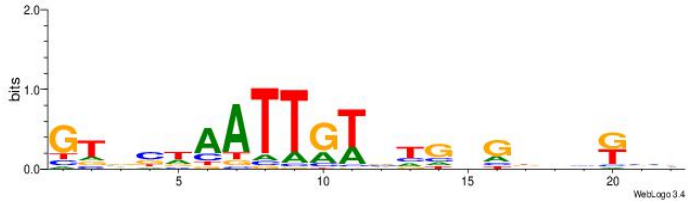


Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	7

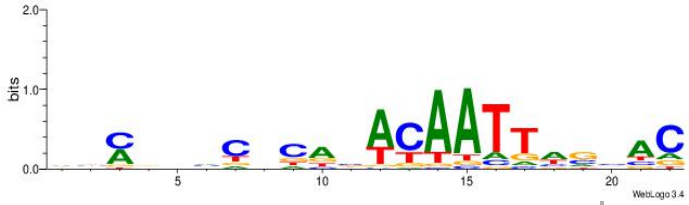
Number of overlap: 14
Similarity score: 0.0267723

Alignment:
GTVBDAATTGTVTGHGDDHKVB
------WWTRWGTGTWTRWW--

Original motif
Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif
Consensus sequence: VVYDDDCHCAVACAATTDBVAC



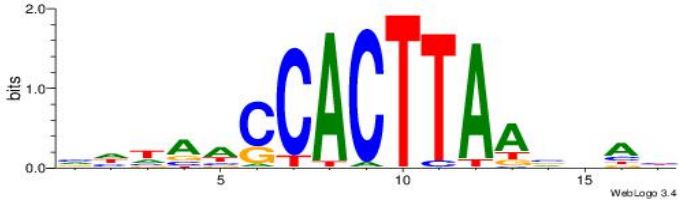
Motif ID: UP00228
Motif name: Bapx1
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 4
Number of overlap: 14
Similarity score: 0.0270117

Alignment:
DTBVTTAAGTGGTTHHV
---WWTRWGTGTWTRWW

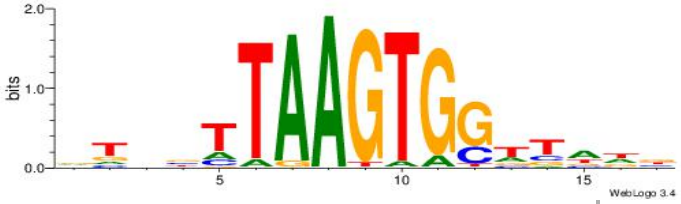
Original motif

Reverse complement motif

Consensus sequence: VHHAACCACTTAAVVAH



Consensus sequence: DTBVTTAAGTGGTTHHV



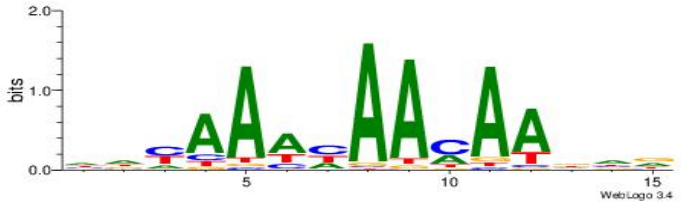
Motif ID:	UP00037
Motif name:	Zfp105_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0271642

Alignment:

```
HDYAAAHAAMAADHD
WWMAWACACWMAWW-
```

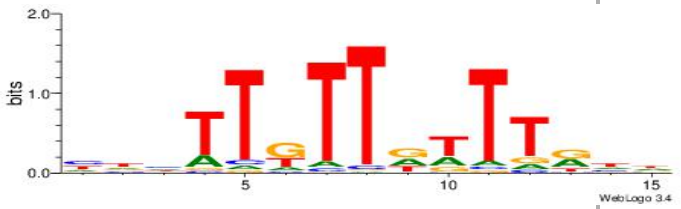
Original motif

Consensus sequence: HDYAAAHAAMAADHD



Reverse complement motif

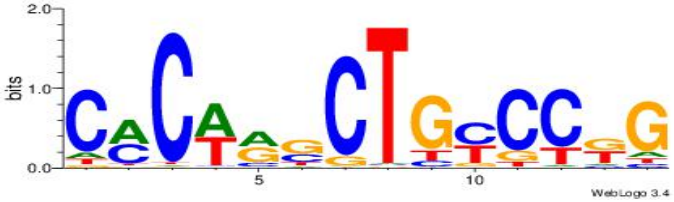
Consensus sequence: HHHTTRTTDTTTKDH



Dataset #: 1 Motif ID: 117 Motif name: C117

Original motif

Consensus sequence: CMCWRSCTGYCCKG



Reverse complement motif

Consensus sequence: CYGGKCAGSKWGYG

Best Matches for Motif ID 117 (Highest to Lowest)

Motif ID:	UP00031
Motif name:	Zbtb3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.023372

Alignment:

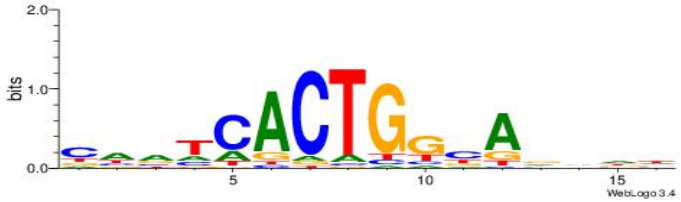
```
DDHHTBCCAGTGABHG
--CYGGKCAGSKWGYG
```

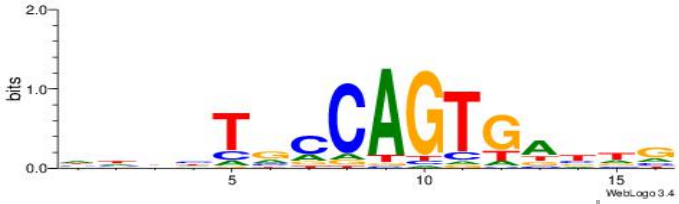
Original motif

Consensus sequence: CHVTCACTGGBADHDD

Reverse complement motif

Consensus sequence: DDHHTBCCAGTGABHG





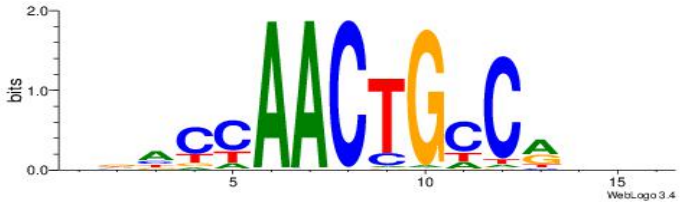
Motif ID:	UP00092
Motif name:	Myb_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	14
Similarity score:	0.0238724

Alignment:

```
DBVKGGCAGTTGGTHB
-CYGGKCAGSKWGYG-
```

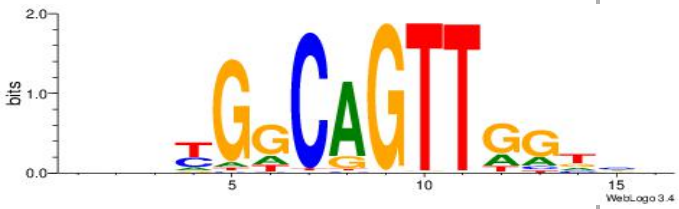
Original motif

Consensus sequence: BDACCAACTGCCRBBH



Reverse complement motif

Consensus sequence: DBVKGGCAGTTGGTHB



Motif ID:	UP00057

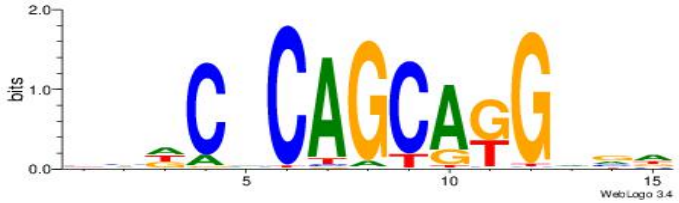
Motif name:	Zic2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0250247

Alignment:

```
HHDCVCAGCAKGVVD
CYGGKCAGSKWGYG-
```

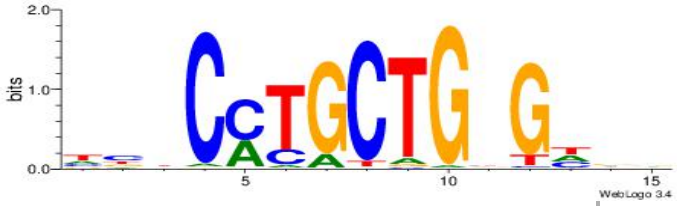
Original motif

Consensus sequence: HHDCVCAGCAKGVVD



Reverse complement motif

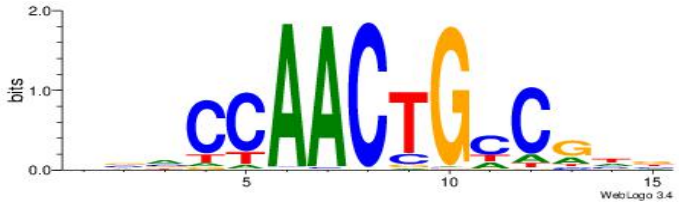
Consensus sequence: DVBCYTGCTGBGDDD



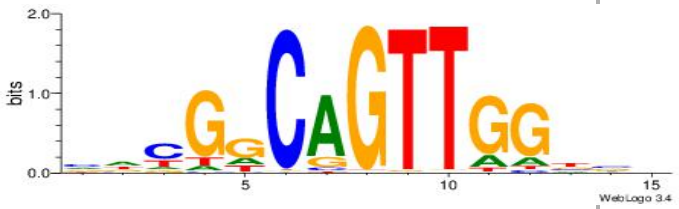
Motif ID:	UP00081
Motif name:	Mybl1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0262709

Alignment:
BHCGGCAGTTGGBBB
CYGGKCAGSKWGYG-

Original motif
Consensus sequence: BBVCCAACTGCCGHB



Reverse complement motif
Consensus sequence: BHCGGCAGTTGGBBB

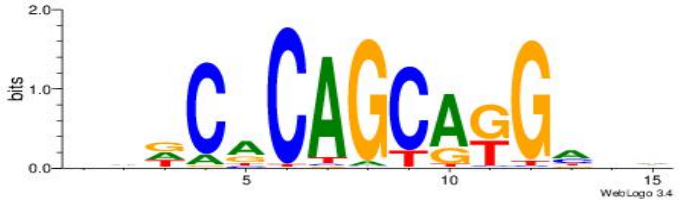


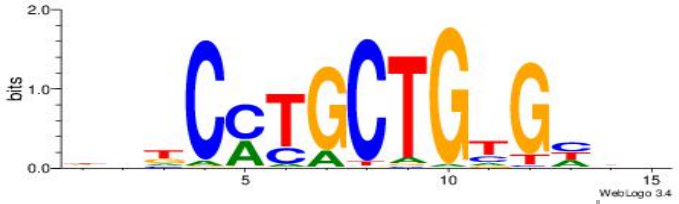
Motif ID:	UP00006
Motif name:	Zic3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	14
Similarity score:	0.0274658

Alignment:
DVHCYTGCTGTGHDH
-CMCWRSCTGYCCKG

Original motif
Consensus sequence: DDDCACAGCAKGHVD

Reverse complement motif
Consensus sequence: DVHCYTGCTGTGHDH

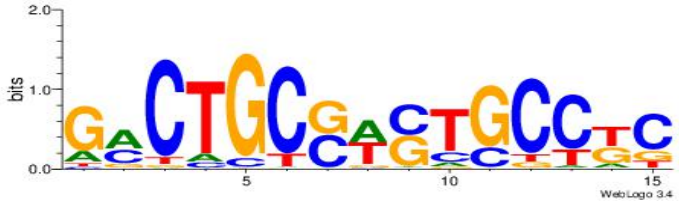




Dataset #: 1 **Motif ID: 118** **Motif name: C118**

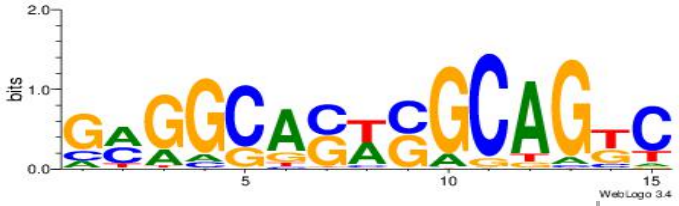
Original motif

Consensus sequence: GMCTGCSWSTGCCKC



Reverse complement motif

Consensus sequence: GRGGCASWSGCAGYC



Best Matches for Motif ID 118 (Highest to Lowest)

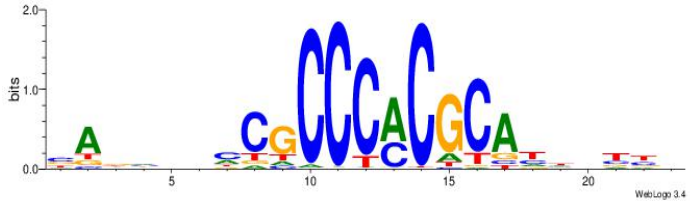
Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	15
Similarity score:	0.0439545

Alignment:

VVVDHHTGCGYGGGCGDHVHHTB
---GMCTGCSWSTGCCKC-----

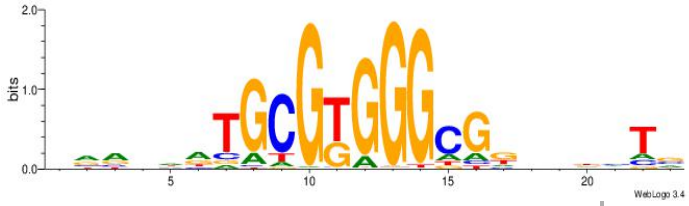
Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif

Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB



Motif ID:	UP00527
Motif name:	Foxn4_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	8
Number of overlap:	15
Similarity score:	0.0446432

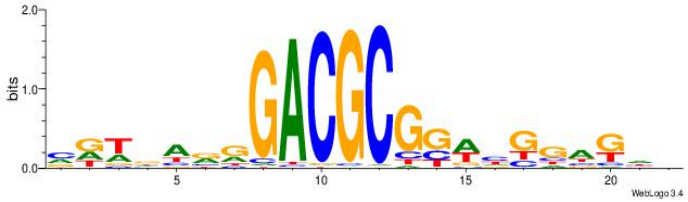
Alignment:
VHYTCCDWCCGCGTCMMTHWHV
GMCTGCSWSTGCCKC-------

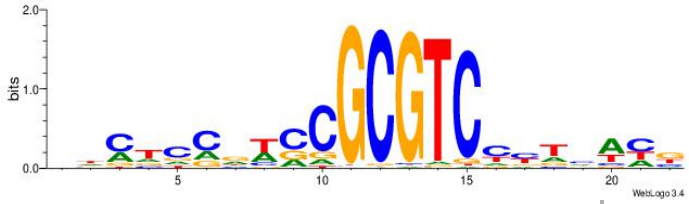
Original motif

Consensus sequence: VDWDARRGACGCGGWHGGAKHV

Reverse complement motif

Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV





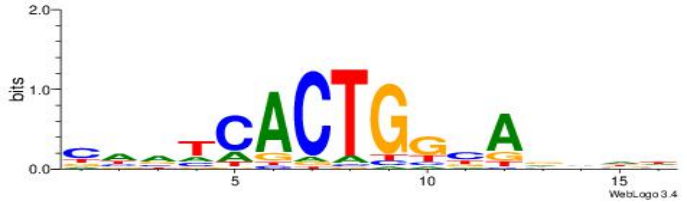
Motif ID:	UP00031
Motif name:	Zbtb3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	15
Similarity score:	0.0451734

Alignment:

```
CHVTCACTGGBADHDD
-GMCTGCSWSTGCCKC
```

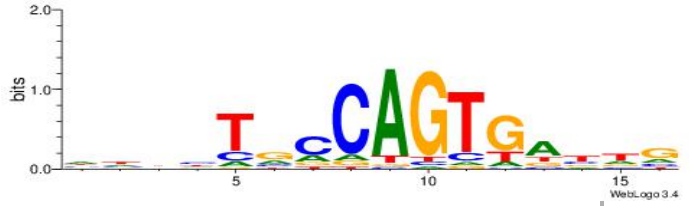
Original motif

Consensus sequence: CHVTCACTGGBADHDD



Reverse complement motif

Consensus sequence: DDHHTBCCAGTGABHG



Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary

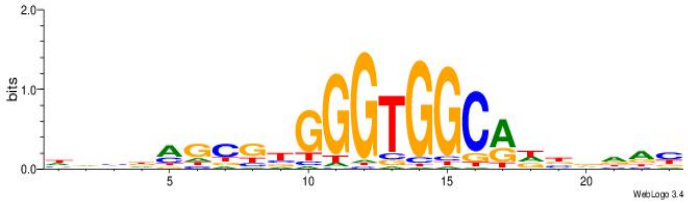
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	15
Similarity score:	0.0458009

Alignment:

```
BDDHVDKGCCACCCVCGCTDBVH
---GMCTGCSWSTGCCKC-----
```

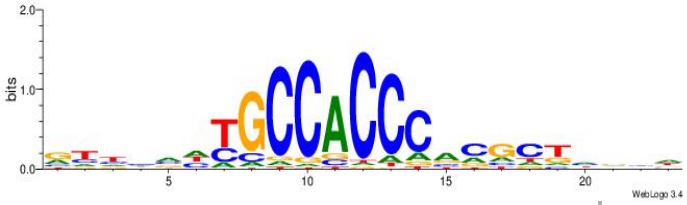
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

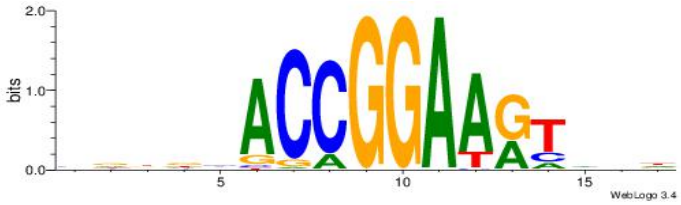
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



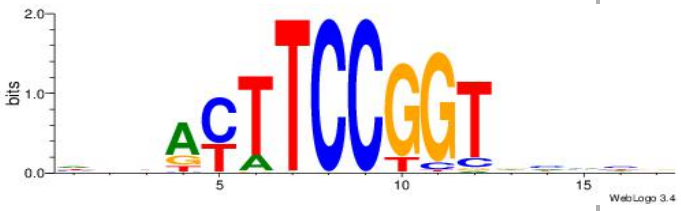
Motif ID:	UP00414
Motif name:	Ets1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	15
Similarity score:	0.0501418

Alignment:
BDDDHACCGGAARTVDD
GRGGCASWSGCAGYC--

Original motif
Consensus sequence: BDDDHACCGGAARTVDD

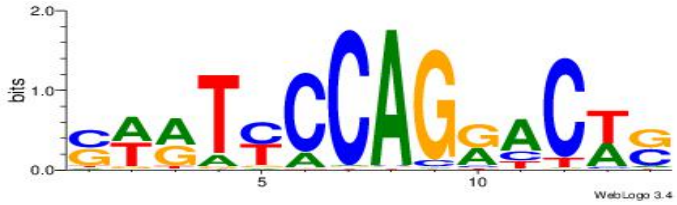


Reverse complement motif
Consensus sequence: DDBAMTTCCGGTDHDHB

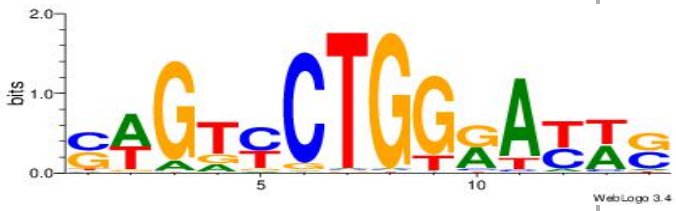


Dataset #: 1 Motif ID: 119 Motif name: C119

Original motif
Consensus sequence: SWRTYCCAGRACWS



Reverse complement motif
Consensus sequence: SWGTMCTGGKAKWS



Best Matches for Motif ID 119 (Highest to Lowest)

Motif ID:	UP00031
Motif name:	Zbtb3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif

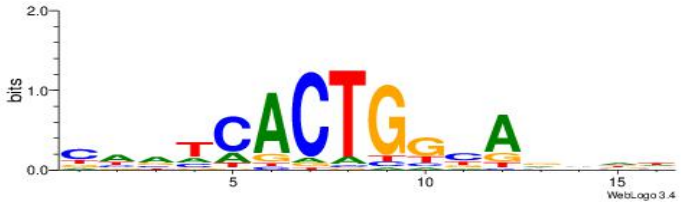
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0288751

Alignment:

```
CHVTCACTGGBADHDD
-SWGTMCTGGKAKWS-
```

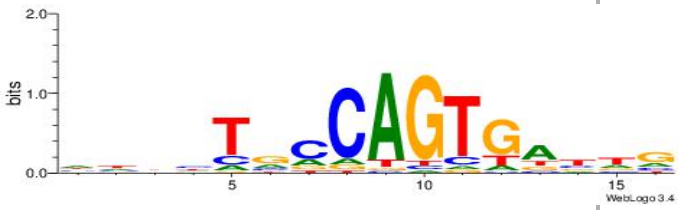
Original motif

Consensus sequence: CHVTCACTGGBADHDD



Reverse complement motif

Consensus sequence: DDHHTBCCAGTGABHG



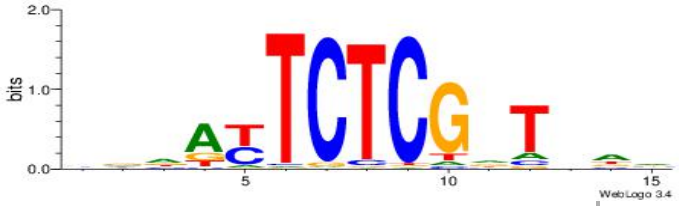
Motif ID:	UP00040
Motif name:	Irf5_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0294274

Alignment:

BHDAHCGAGARTHBV
SWRTYCCAGRACWS-

Original motif
Consensus sequence: BHDAHCGAGARTHBV

Reverse complement motif
Consensus sequence: VBHAKTCTCGHTHHV

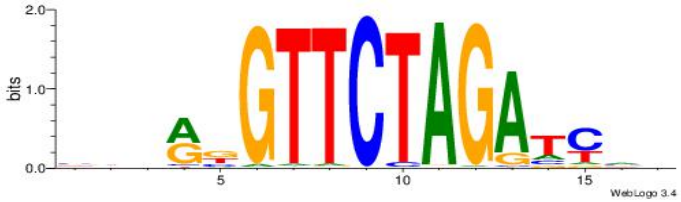


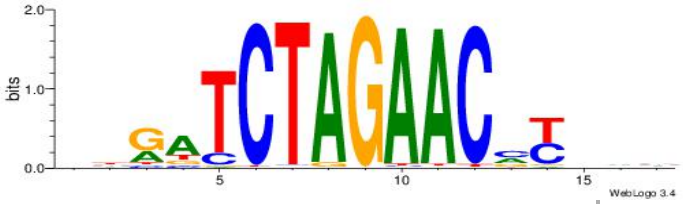
Motif ID:	UP00019
Motif name:	Zbtb12_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.031753

Alignment:
BDHRBGTTCTAGATCVB
---SWRTYCCAGRACWS

Original motif
Consensus sequence: BDHRBGTTCTAGATCVB

Reverse complement motif
Consensus sequence: BBGATCTAGAACBKHDB





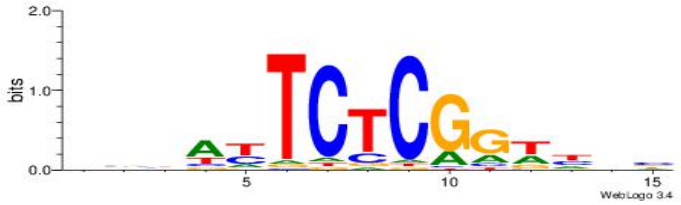
Motif ID:	UP00018
Motif name:	Irf4_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0323112

Alignment:

```
BHHWCCGAGAMTVVB
SWRTYCCAGRACWS-
```

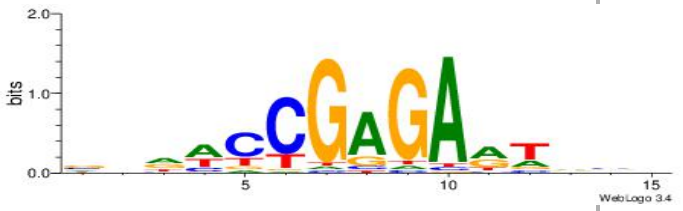
Original motif

Consensus sequence: VVBAYTCTCGGWHDB



Reverse complement motif

Consensus sequence: BHHWCCGAGAMTVVB



Motif ID:	UP00203

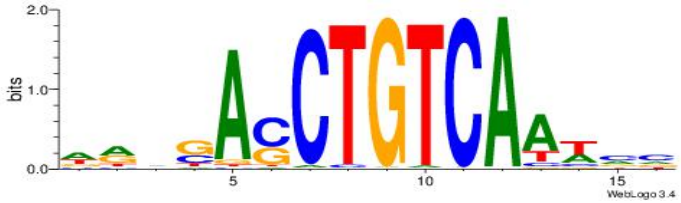
Motif name:	Pknox1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	14
Similarity score:	0.0328626

Alignment:

```
VVWTTGACAGSTSBKD
-SWRTYCCAGRACWS-
```

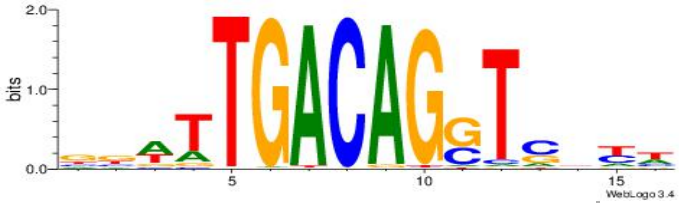
Original motif

Consensus sequence: DRVSASCTGTCAAWVV



Reverse complement motif

Consensus sequence: VVWTTGACAGSTSBKD



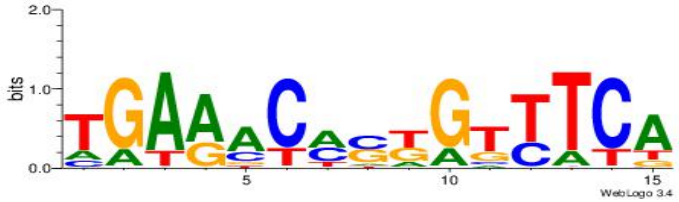
Dataset #: 1 Motif ID: 120 Motif name: C120

Original motif

Consensus sequence: TGARACMSKGTYTCA

Reverse complement motif

Consensus sequence: TGAMACRSYGTKTCA



Best Matches for Motif ID 120 (Highest to Lowest)

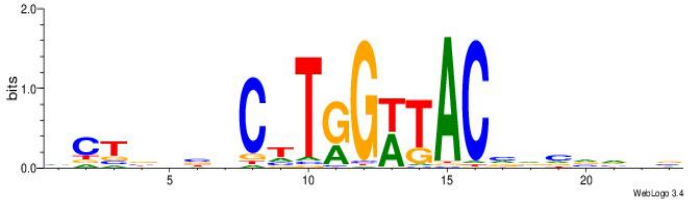
Motif ID:	UP00098
Motif name:	Rfx3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	15
Similarity score:	0.0456935

Alignment:

```
BDBBVBVGTAWCCAAGVBHBAGB
------TGARACMSKGTYTCA--
```

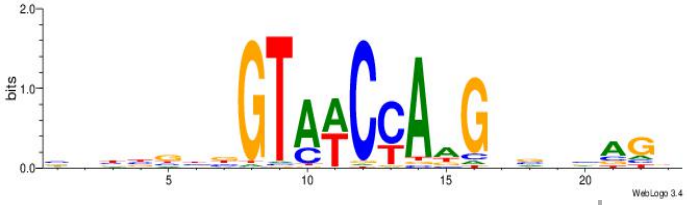
Original motif

Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB



Reverse complement motif

Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB



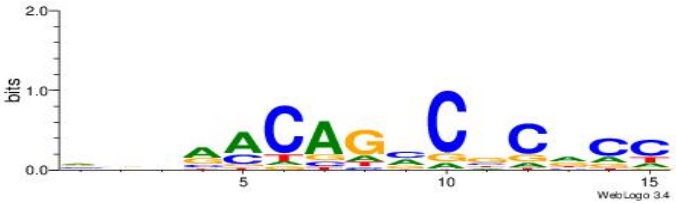
Motif ID:	UP00036
Motif name:	Myf6_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	15
Similarity score:	0.049534

Alignment:

```
GGDGBGVCTGTKVVB
TGAMACRSYGTKTCA
```

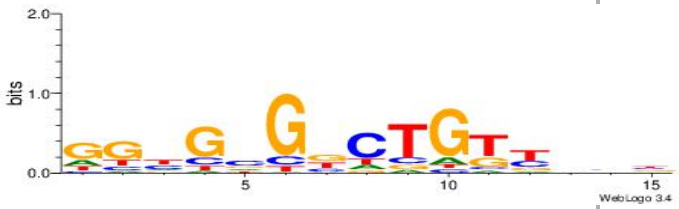
Original motif

Consensus sequence: VVVRACAGVCBCDCC



Reverse complement motif

Consensus sequence: GGDGBGVCTGTKVVB

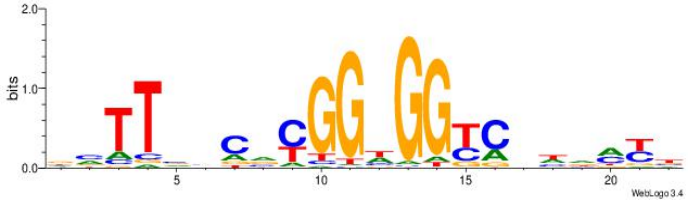


Motif ID:	UP00540
Motif name:	Gli3_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	15

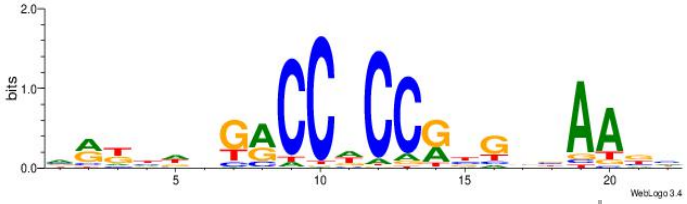
Similarity score: 0.0503421

Alignment:
VMYDHDGMCCHCCKBGVVAAVH
----TGAMACRSYGTKTCA---

Original motif
Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



Reverse complement motif
Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH

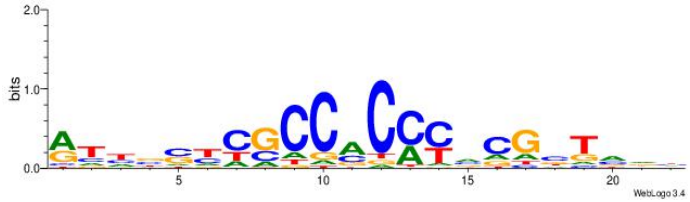


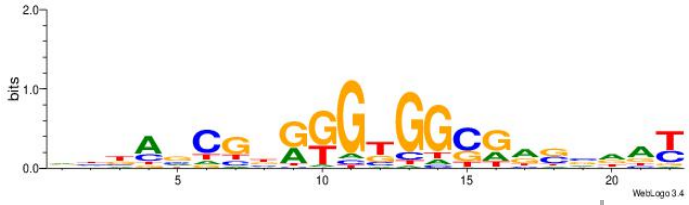
Motif ID: UP00539
Motif name: Gli2_v016060_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 7
Number of overlap: 15
Similarity score: 0.0525165

Alignment:
RTHBSYCGCCMCMYVCGBTVDH
------TGARACMSKGTYTCA-

Original motif
Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH

Reverse complement motif
Consensus sequence: HDBABCGBKRGYGGCGMSBHAK





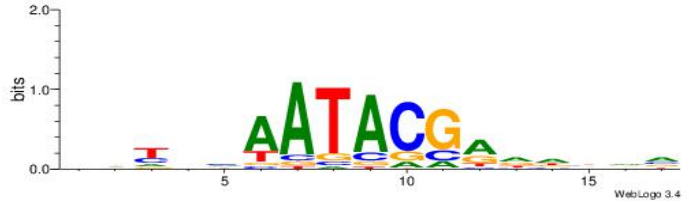
Motif ID:	UP00059
Motif name:	Arid5a_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	15
Similarity score:	0.0539819

Alignment:

```
BDYDVAATACGADDBVV
--TGARACMSKGTYTCA
```

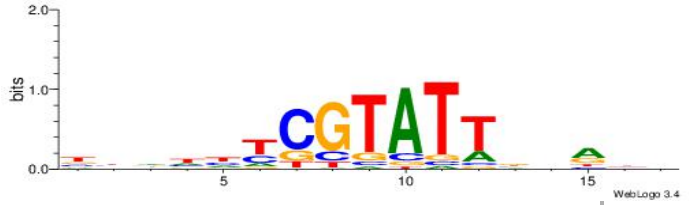
Original motif

Consensus sequence: BDYDVAATACGADDBVV



Reverse complement motif

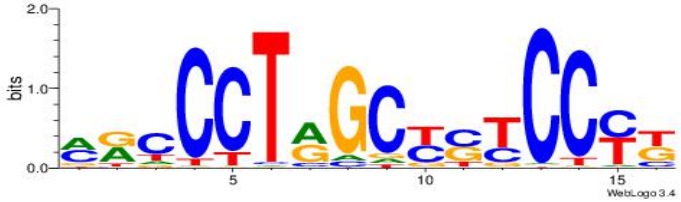
Consensus sequence: BBVDDTCGTATTVDMHB



Dataset #: 1 Motif ID: 121 Motif name: C121

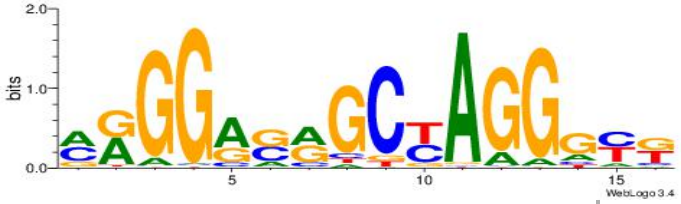
Original motif

Consensus sequence: MRCCCTRGCYSTCCYK



Reverse complement motif

Consensus sequence: RKGGASMGCKAGGGMY



Best Matches for Motif ID 121 (Highest to Lowest)

Motif ID:	UP00526
Motif name:	Foxn1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	16
Similarity score:	0.0432795

Alignment:

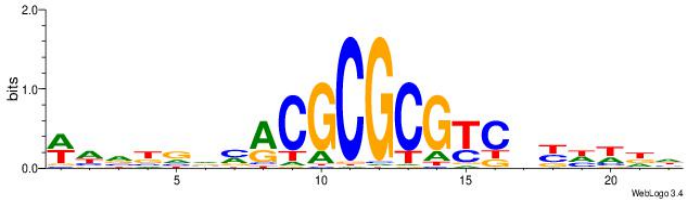
```
WHVBVVMACGCGCGTCDYHWDH
--RKGGASMGCKAGGGMY----
```

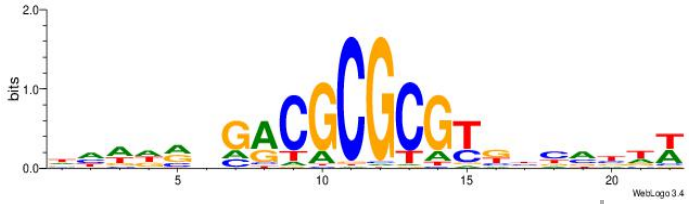
Original motif

Consensus sequence: WHVBVVMACGCGCGTCDYHWDH

Reverse complement motif

Consensus sequence: HDWHMHGACGCGCGTRBVVBHW





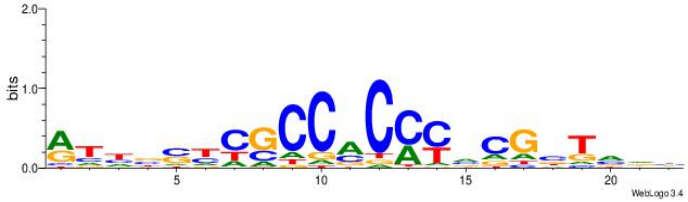
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	16
Similarity score:	0.0435346

Alignment:

```
HDBABCGBKRGYGGCGMSBHAK
------RKGGASMGCKAGGGMY
```

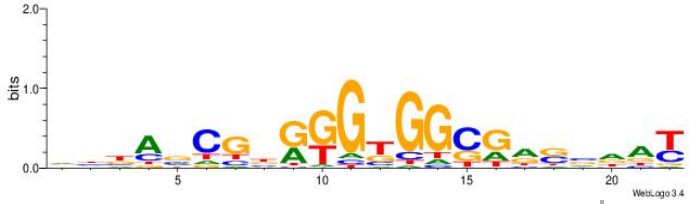
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



Motif ID: UP00539

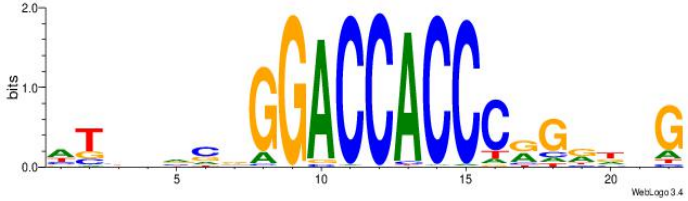
Motif name:	Gli2_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	16
Similarity score:	0.043859

Alignment:

```
CBDMCMGGGTGGTCCHVBVBAH
-MRCCCTRGCYSTCCYK-----
```

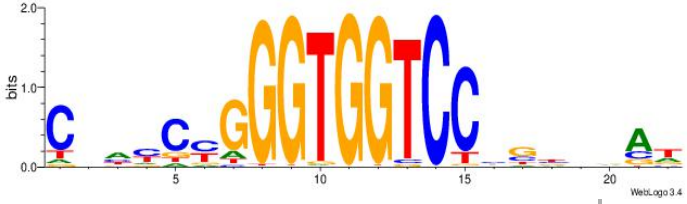
Original motif

Consensus sequence: HTBVVVDGGACCACCCRGRDBG



Reverse complement motif

Consensus sequence: CBDMCMGGGTGGTCCHVBVBAH

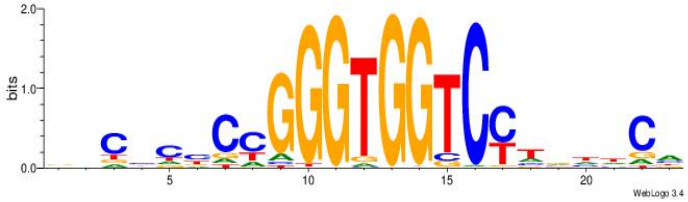


Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	16

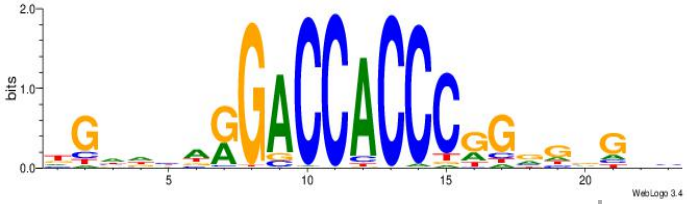
Similarity score: 0.0450464

Alignment:
BHCBCBCCGGGTGGTCYHVHDCH
---MRCCCTRGCYSTCCYK----

Original motif
Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif
Consensus sequence: HGDHVHKGACCACCCGGBGBGDB

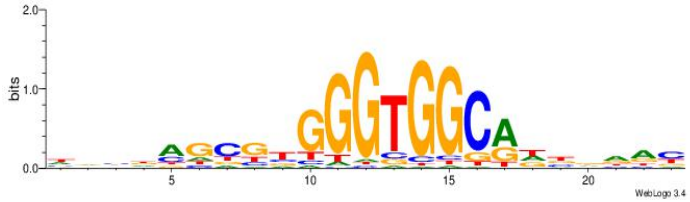


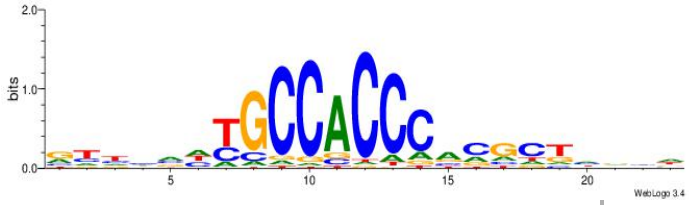
Motif ID: UP00538
Motif name: Gli1_v016060_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 1
Number of overlap: 16
Similarity score: 0.0451554

Alignment:
HVBDAGCGBGGGTGGCRDBDDDB
-------RKGGASMGCKAGGGMY

Original motif
Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB

Reverse complement motif
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH

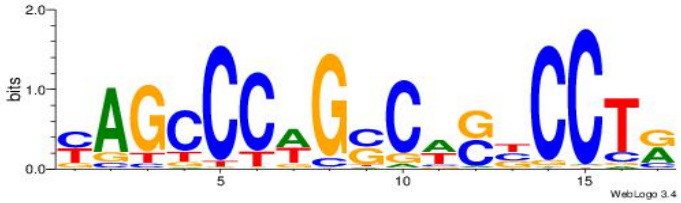




Dataset #: 1 **Motif ID: 122** **Motif name: C122**

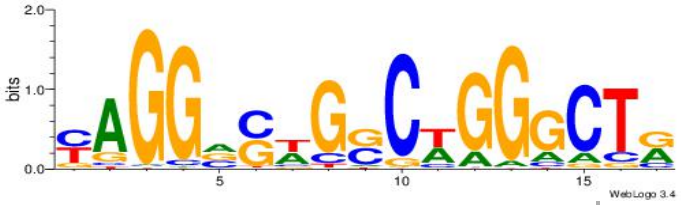
Original motif

Consensus sequence: YAGCCCWGSCWSBCCTR



Reverse complement motif

Consensus sequence: MAGGVSWGSCWGGGCTK



Best Matches for Motif ID 122 (Highest to Lowest)

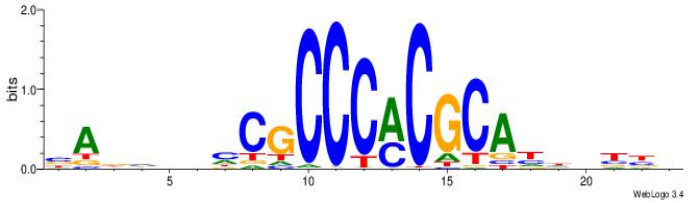
Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	17
Similarity score:	0.0374003

Alignment:

VVVDHHTGCGYGGGCGDHVHHTB
MAGGVSWGSCWGGGCTK------

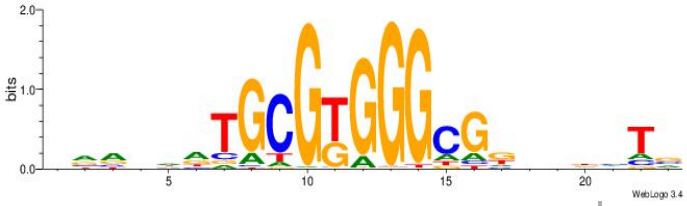
Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif

Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB



Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	17
Similarity score:	0.0431179

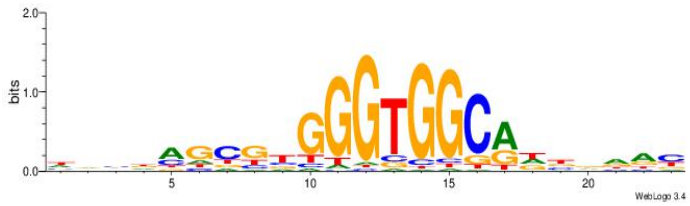
Alignment:
BDDHVDKGCCACCCVCGCTDBVH
----YAGCCCWGSCWSBCCTR--

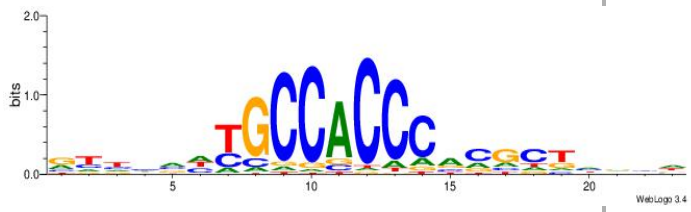
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB

Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH





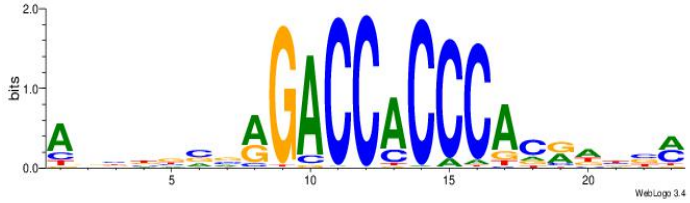
Motif ID:	UP00540
Motif name:	Gli3_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	17
Similarity score:	0.0445547

Alignment:

```
YBVDMGTGGGTGGTCKVVBVBBT
MAGGVSWGSCWGGGCTK------
```

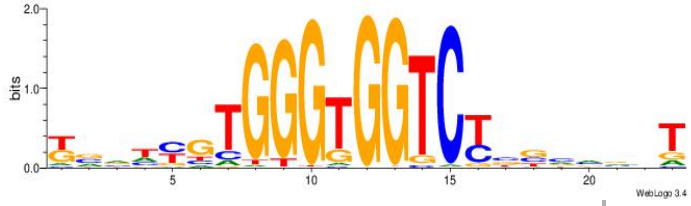
Original motif

Consensus sequence: ABBBBVVRGACCACCCACRDBBM



Reverse complement motif

Consensus sequence: YBVDMGTGGGTGGTCKVVBVBBT



Motif ID:	UP00539

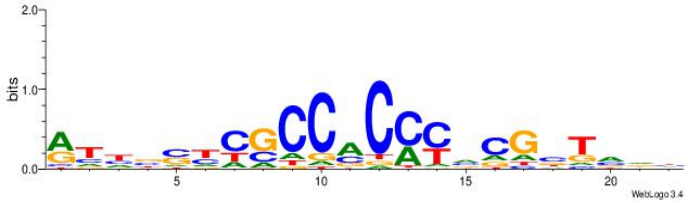
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	17
Similarity score:	0.0459573

Alignment:

```
HDBABCGBKRGYGGCGMSBHAK
-----MAGGVSWGSCWGGGCTK
```

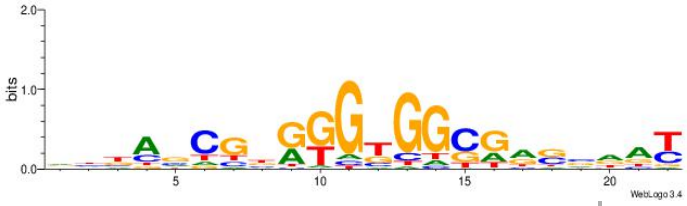
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK

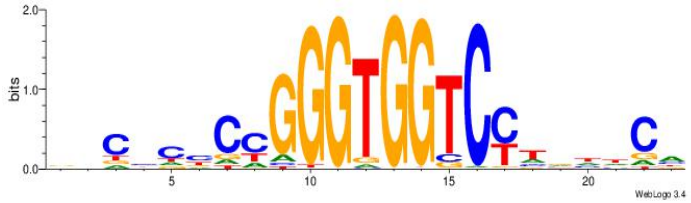


Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	17

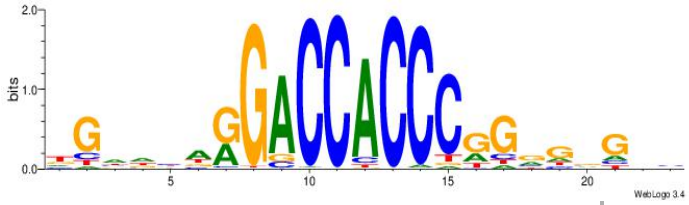
Similarity score: 0.0473282

Alignment:
BHCBCBCCGGGTGGTCYHVHDCH
--YAGCCCWGSCWSBCCTR----

Original motif
Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH

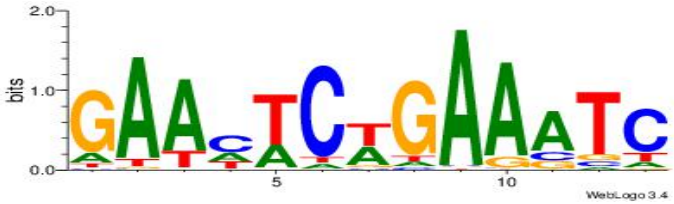


Reverse complement motif
Consensus sequence: HGDHVHKGACCACCCGGBGBGDB

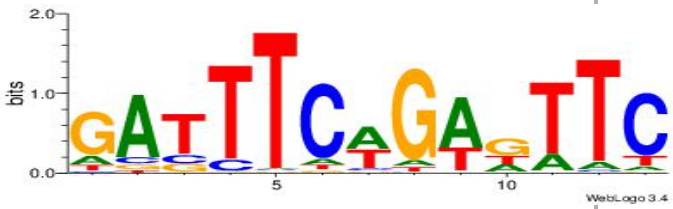


Dataset #: 1 Motif ID: 123 Motif name: C123

Original motif
Consensus sequence: GAAMTCWGAAATC



Reverse complement motif
Consensus sequence: GATTTCWGARTTC



Best Matches for Motif ID 123 (Highest to Lowest)

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

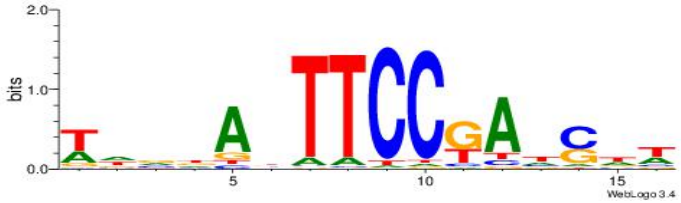
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	13
Similarity score:	0.0397393

Alignment:

```
WDVDABTTCCKAHSDW
---GATTTCWGARTTC
```

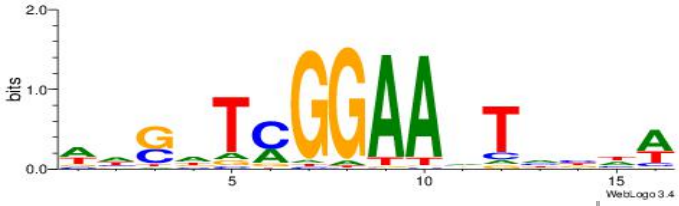
Original motif

Consensus sequence: WDVDABTTCCKAHSDW



Reverse complement motif

Consensus sequence: WDSHTYGGAAVTDVDW



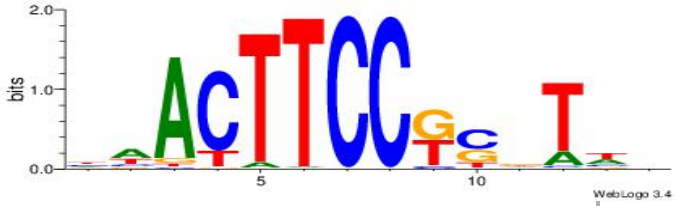
Motif ID:	UP00409
Motif name:	Elf5
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	13
Similarity score:	0.0411525

Alignment:

BWAHSMGGAAGTWD
GAAMTCWGAAATC-

Original motif
Consensus sequence: BWAHSMGGAAGTWD

Reverse complement motif
Consensus sequence: DWACTTCCRSDTWV

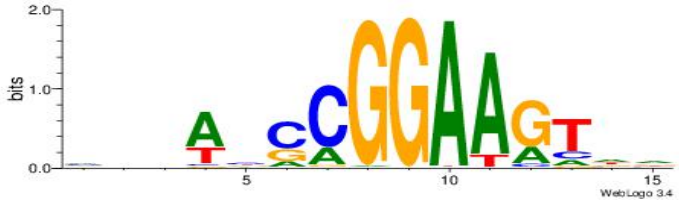


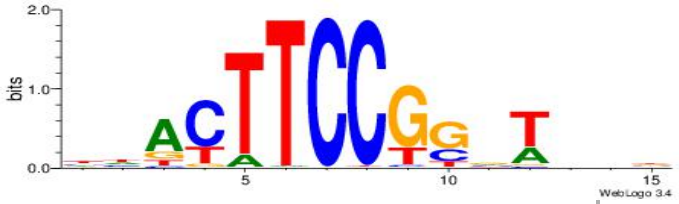
Motif ID:	UP00015
Motif name:	Ehf_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	13
Similarity score:	0.0417179

Alignment:
VBDABCCGGAAGTDD
-GAAMTCWGAAATC-

Original motif
Consensus sequence: VBDABCCGGAAGTDD

Reverse complement motif
Consensus sequence: DDACTTCCGGBTHBB





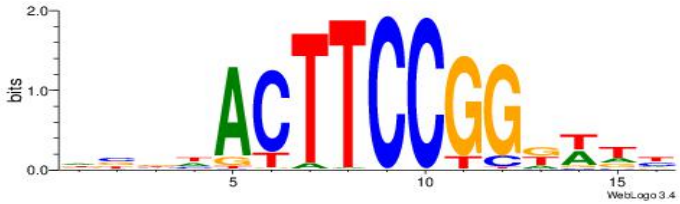
Motif ID:	UP00413
Motif name:	Elf4
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	13
Similarity score:	0.0418022

Alignment:

```
DBBHACTTCCGGKWTH
---GATTTCWGARTTC
```

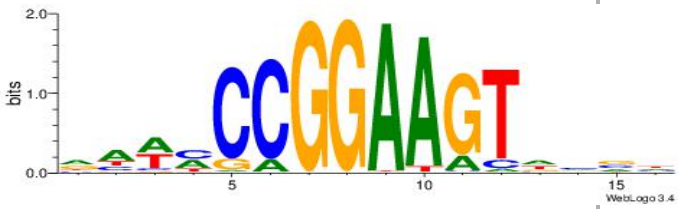
Original motif

Consensus sequence: DBBHACTTCCGGKWTH



Reverse complement motif

Consensus sequence: HAWYCCGGAAGTHBBD



Motif ID:	UP00418

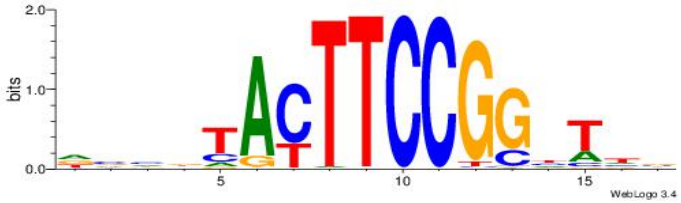
Motif name:	Etv6
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	13
Similarity score:	0.0418622

Alignment:

```
BHAHCCGGAAGTABDVD
GAAMTCWGAAATC----
```

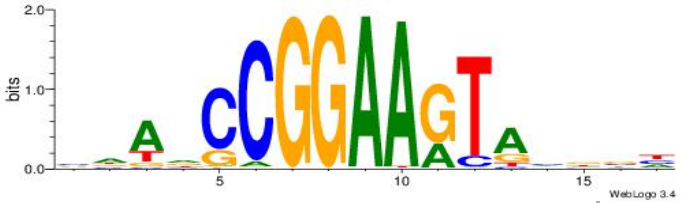
Original motif

Consensus sequence: DVHBTACTTCCGGHTHB



Reverse complement motif

Consensus sequence: BHAHCCGGAAGTABDVD



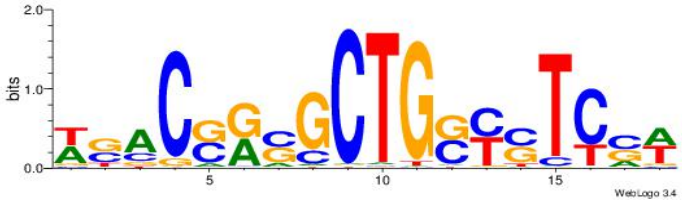
Dataset #: 1 Motif ID: 124 Motif name: C124

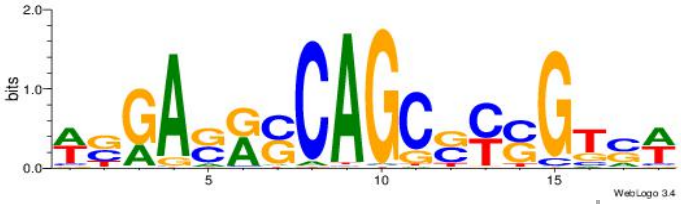
Original motif

Consensus sequence: WSACSRSGCTGSYSTCSW

Reverse complement motif

Consensus sequence: WSGASKSCAGCSMSGTSW





Best Matches for Motif ID 124 (Highest to Lowest)

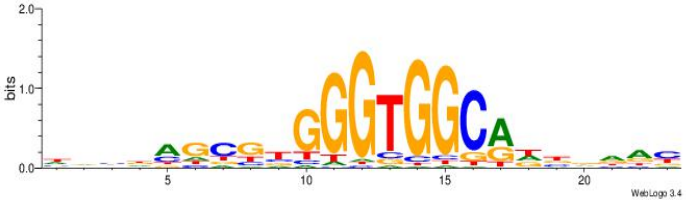
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	18
Similarity score:	0.0329213

Alignment:

```
BDDHVDKGCCACCCVCGCTDBVH
--WSGASKSCAGCSMSGTSW---
```

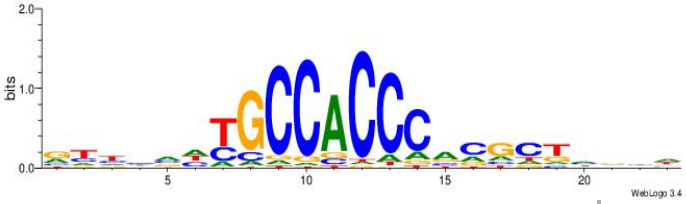
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



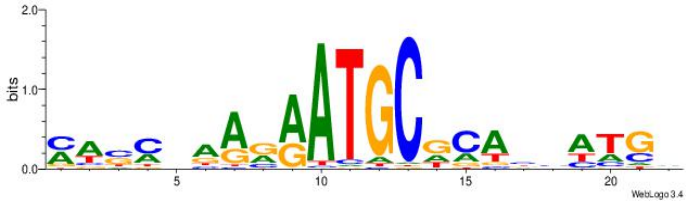
Motif ID:	UP00528
Motif name:	Foxm1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	18
Similarity score:	0.0329451

Alignment:

```
MWSMBAARRATGCDCABHATGD
-WSACSRSGCTGSYSTCSW---
```

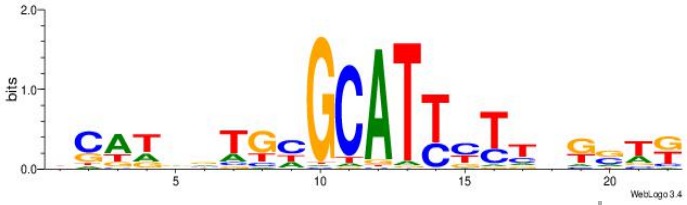
Original motif

Consensus sequence: MWSMBAARRATGCDCABHATGD



Reverse complement motif

Consensus sequence: DCATDBTGHGCATKMTTBRSWR

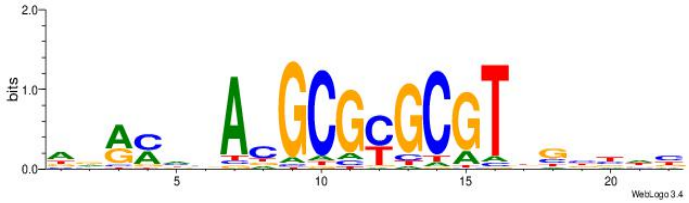


Motif ID:	UP00526
Motif name:	Foxn1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4

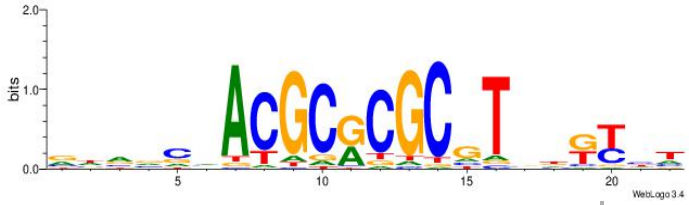
Number of overlap: 18
Similarity score: 0.0351741

Alignment:
BDVBCDACGCKCGCGTBHRKHD
-WSACSRSGCTGSYSTCSW---

Original motif
Consensus sequence: DDRMHBACGCGYGCGTDGBBDB



Reverse complement motif
Consensus sequence: BDVBCDACGCKCGCGTBHRKHD



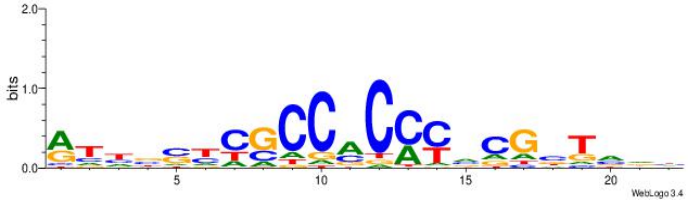
Motif ID: UP00539
Motif name: Gli2_v016060_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 3
Number of overlap: 18
Similarity score: 0.0362523

Alignment:
RTHBSYCGCCMCMYVCGBTVDH
--WSGASKSCAGCSMSGTSW--

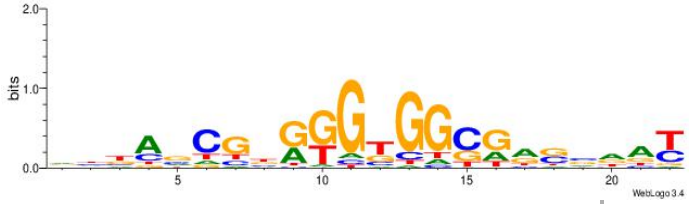
Original motif

Reverse complement motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



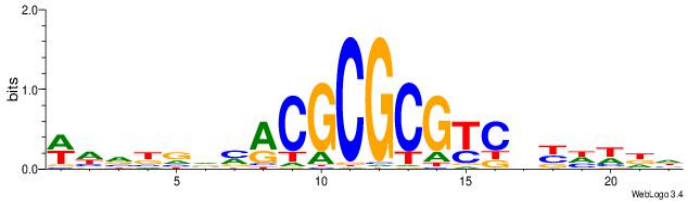
Motif ID:	UP00526
Motif name:	Foxn1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	18
Similarity score:	0.0378518

Alignment:

```
WHVBVVMACGCGCGTCDYHWDH
--WSACSRSGCTGSYSTCSW--
```

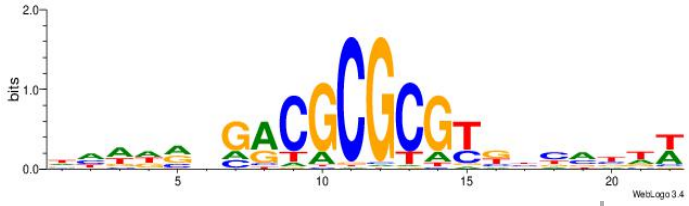
Original motif

Consensus sequence: WHVBVVMACGCGCGTCDYHWDH



Reverse complement motif

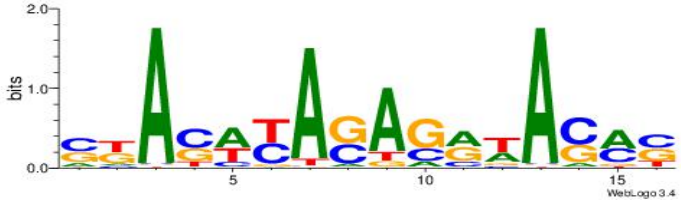
Consensus sequence: HDWHMHGACGCGCGTRBVVBHW



Dataset #: 1 **Motif ID: 125** **Motif name: C125**

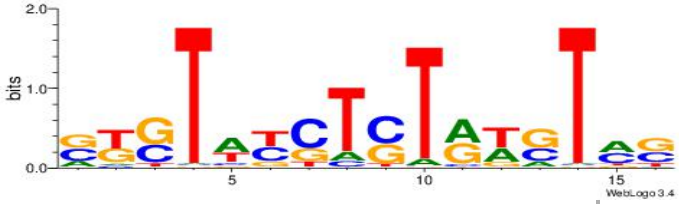
Original motif

Consensus sequence: SKASWYASAGRWASMS



Reverse complement motif

Consensus sequence: SYSTWKCTSTMWSTRS



Best Matches for Motif ID 125 (Highest to Lowest)

Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	16
Similarity score:	0.0304657

Alignment:

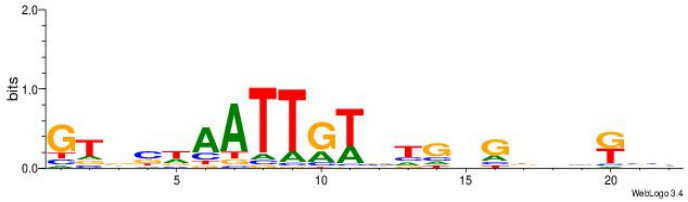
```
GTVBDAATTGTVTGHGDDHKVB
-SYSTWKCTSTMWSTRS-----
```

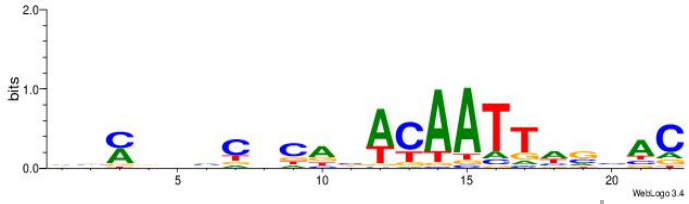
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB

Reverse complement motif

Consensus sequence: VVYDDDCHCAVACAATTDBVAC





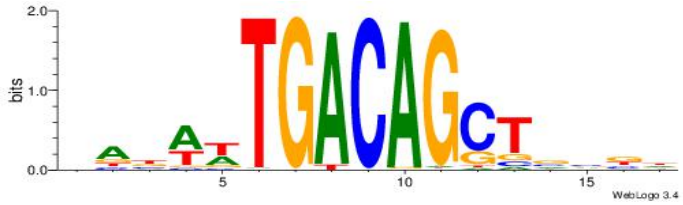
Motif ID:	UP00122
Motif name:	Tgif1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	16
Similarity score:	0.033763

Alignment:

```
DBVVAGCTGTCAWWVTH
SYSTWKCTSTMWSTRS-
```

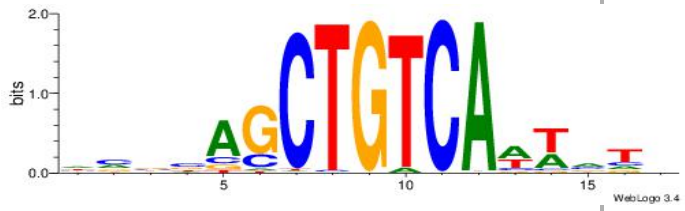
Original motif

Consensus sequence: DABWWTGACAGCTVVBD



Reverse complement motif

Consensus sequence: DBVVAGCTGTCAWWVTH



Motif ID:	UP00014

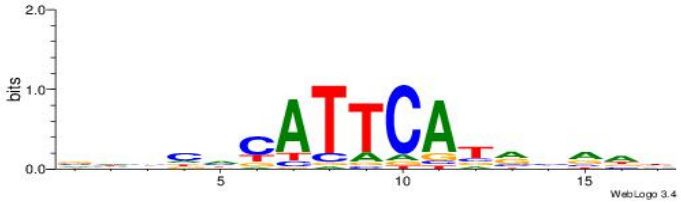
Motif name:	Sox17_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	16
Similarity score:	0.0342041

Alignment:

```
VHBHHCATTCATRHVDD
SKASWYASAGRWASMS-
```

Original motif

Consensus sequence: VHBHHCATTCATRHVDD



Reverse complement motif

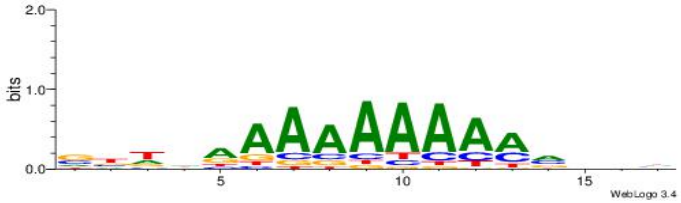
Consensus sequence: DDBDKATGAATGHDBHV

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:	1
Number of overlap:	16

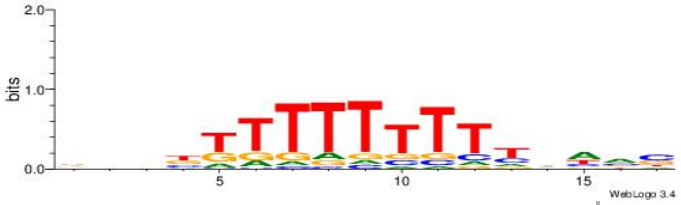
Similarity score: 0.0346406

Alignment:
VBDDAAAAAAAAMVBHH
SKASWYASAGRWASMS-

Original motif
Consensus sequence: VBDDAAAAAAAAMVBHH



Reverse complement motif
Consensus sequence: HHVBYTTTTTTTTDDVV

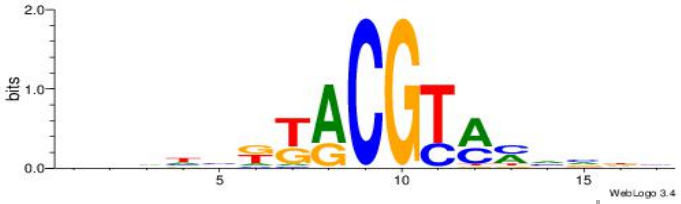


Motif ID:	UP00084
Motif name:	Gmeb1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	16
Similarity score:	0.0359108

Alignment:
BHBBKKACGTMMVDBVB
-SKASWYASAGRWASMS

Original motif
Consensus sequence: BHBBKKACGTMMVDBVB

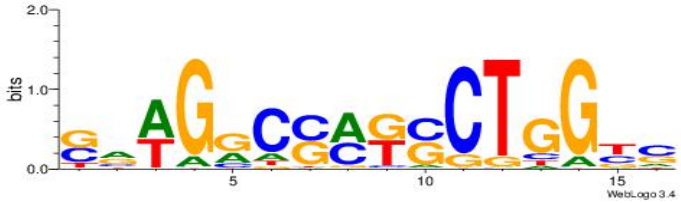
Reverse complement motif
Consensus sequence: BVVDVRYACGTRYVBHB



Dataset #: 1 Motif ID: 126 Motif name: C126

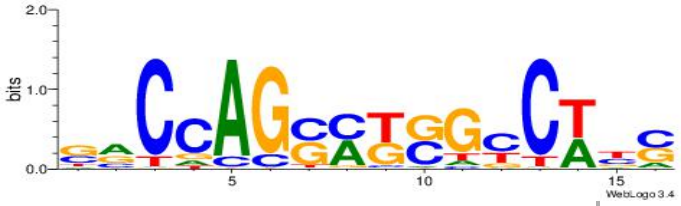
Original motif

Consensus sequence: SVWGRCSMKSCTGGYS



Reverse complement motif

Consensus sequence: SMCCAGSYYSGMCWBS



Best Matches for Motif ID 126 (Highest to Lowest)

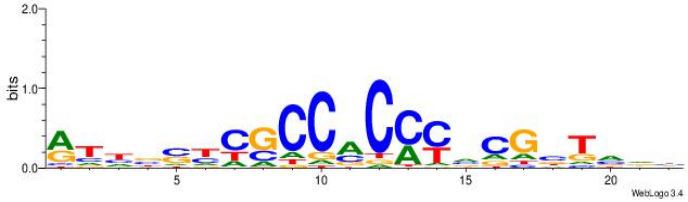
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	16
Similarity score:	0.0246313

Alignment:

```
RTHBSYCGCCMCMYVCGBTVDH
SVWGRCSMKSCTGGYS------
```

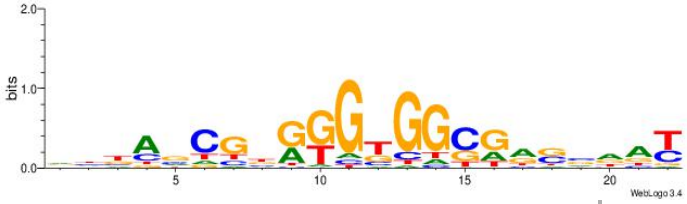
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



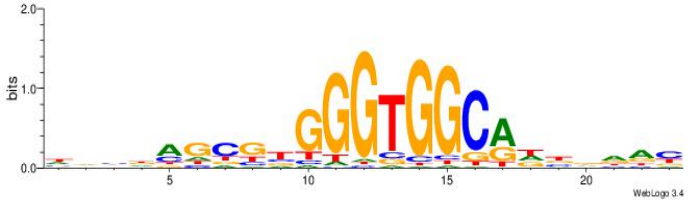
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	16
Similarity score:	0.0257483

Alignment:

```
BDDHVDKGCCACCCVCGCTDBVH
------SMCCAGSYYSGMCWBS-
```

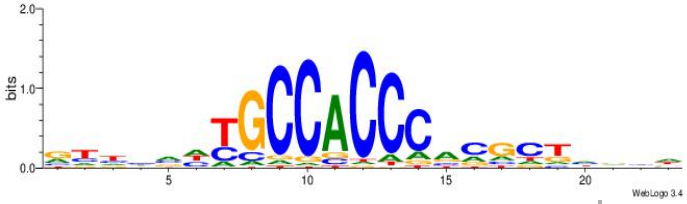
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



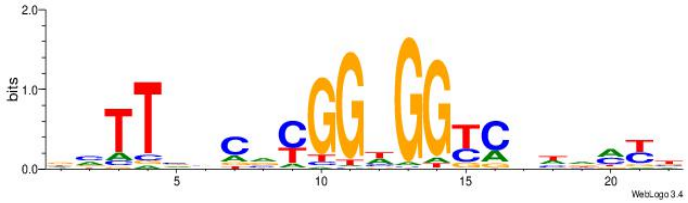
Motif ID:	UP00540
Motif name:	Gli3_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	16
Similarity score:	0.0279168

Alignment:

```
VMYDHDGMCCHCCKBGVVAAVH
--SVWGRCSMKSCTGGYS----
```

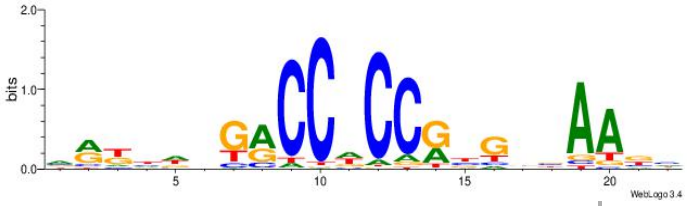
Original motif

Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



Reverse complement motif

Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH

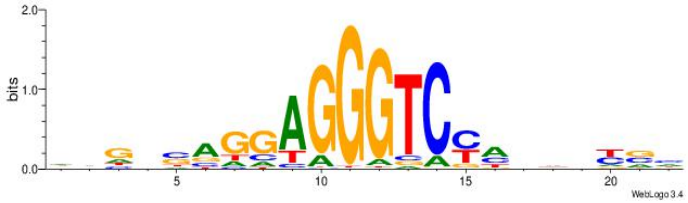


Motif ID:	UP00539
Motif name:	Gli2_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward

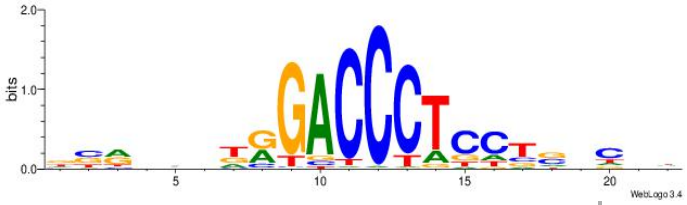
Position number:	6
Number of overlap:	16
Similarity score:	0.0307173

Alignment:
DVMHHDHKGACCCTCCTSVCBH
-----SVWGRCSMKSCTGGYS-

Original motif
Consensus sequence: HVGVSAGGAGGGTCYHHHHYVH



Reverse complement motif
Consensus sequence: DVMHHDHKGACCCTCCTSVCBH

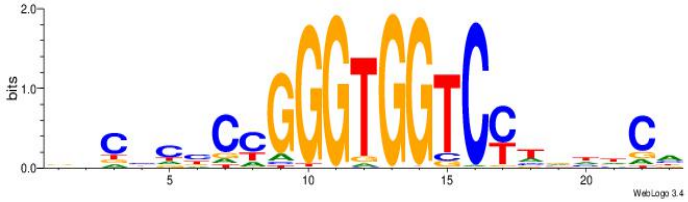


Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	16
Similarity score:	0.0329173

Alignment:
HGDHVHKGACCACCCGGBGBGDB
----SVWGRCSMKSCTGGYS---

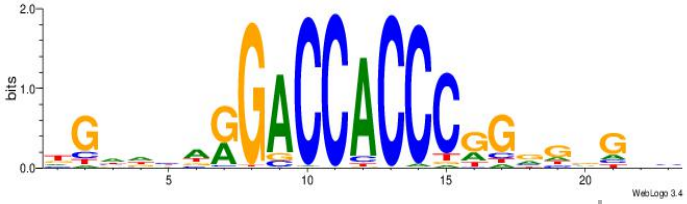
Original motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif

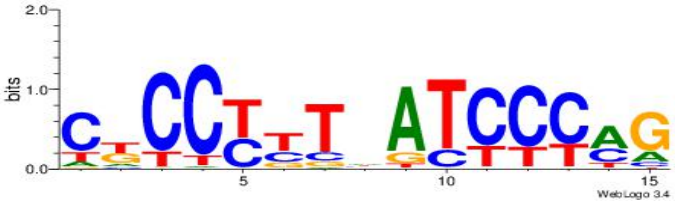
Consensus sequence: HGDHVHKGACCACCCGGBGBGDB



Dataset #: 1 Motif ID: 127 Motif name: C127

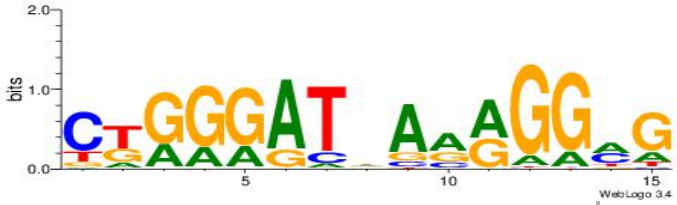
Original motif

Consensus sequence: CKCCYYTHATCCCMG



Reverse complement motif

Consensus sequence: CYGGGATHAMMGGRG

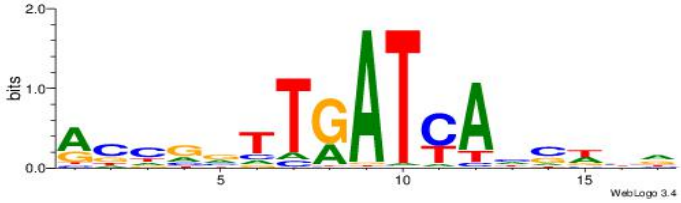


Best Matches for Motif ID 127 (Highest to Lowest)

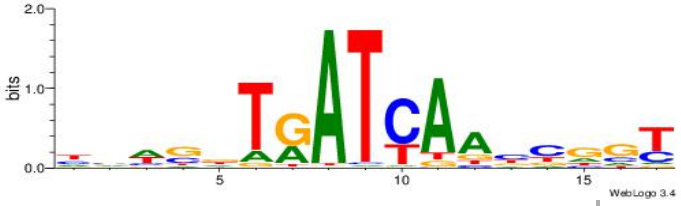
Motif ID:	UP00219
Motif name:	Cutl1_3494.1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	15
Similarity score:	0.0320609

Alignment:
DBWSDTKATCAAVCGGT
--CYGGGATHAMMGGRG

Original motif
Consensus sequence: ACCGVTTGATYAHSWBD



Reverse complement motif
Consensus sequence: DBWSDTKATCAAVCGGT

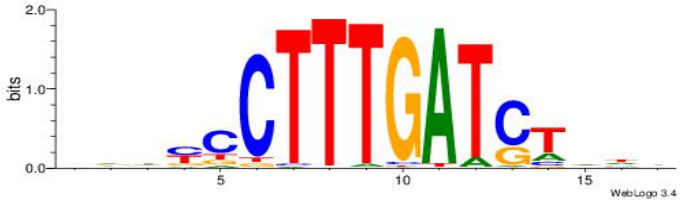


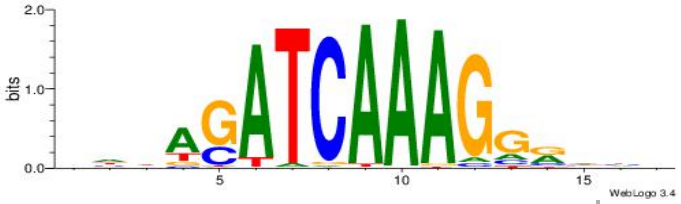
Motif ID:	UP00067
Motif name:	Lef1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	15
Similarity score:	0.0338391

Alignment:
VDDAGATCAAAGGKDDD
CYGGGATHAMMGGRG--

Original motif
Consensus sequence: DDDYCCTTTGATCTDDV

Reverse complement motif
Consensus sequence: VDDAGATCAAAGGKDDD





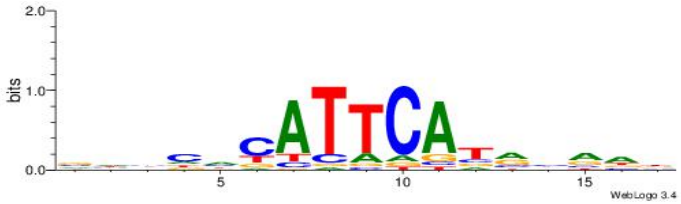
Motif ID:	UP00014
Motif name:	Sox17_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	15
Similarity score:	0.0345074

Alignment:

```
DDBDKATGAATGHDBHV
CYGGGATHAMMGGRG--
```

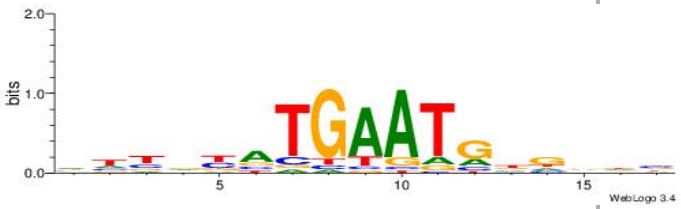
Original motif

Consensus sequence: VHBHHCATTCATRHVDD



Reverse complement motif

Consensus sequence: DDBDKATGAATGHDBHV



Motif ID:	UP00058

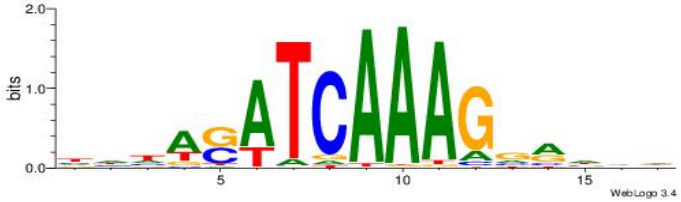
Motif name:	Tcf3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	15
Similarity score:	0.0345461

Alignment:

```
HHHKVCTTTGATSTHHH
CYGGGATHAMMGGRG--
```

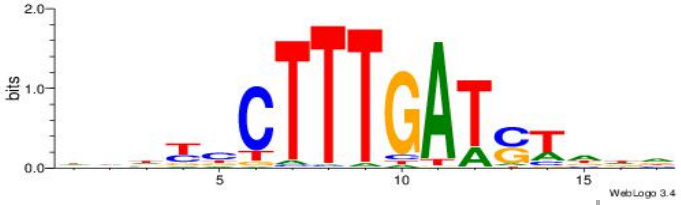
Original motif

Consensus sequence: HHHASATCAAAGVRHHH



Reverse complement motif

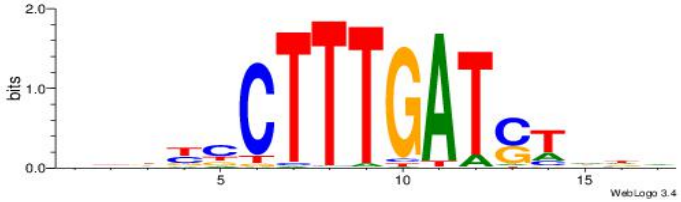
Consensus sequence: HHHKVCTTTGATSTHHH



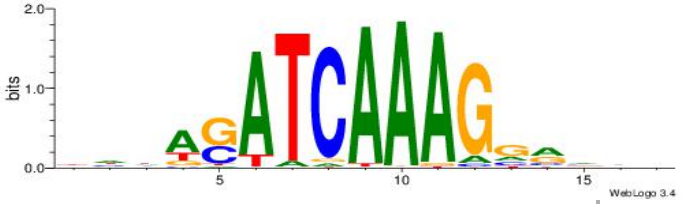
Motif ID:	UP00083
Motif name:	Tcf7l2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	15
Similarity score:	0.0348977

Alignment:
BDDASATCAAAGGMDDD
CYGGGATHAMMGGRG--

Original motif
Consensus sequence: DDDYCCTTTGATSTDDV

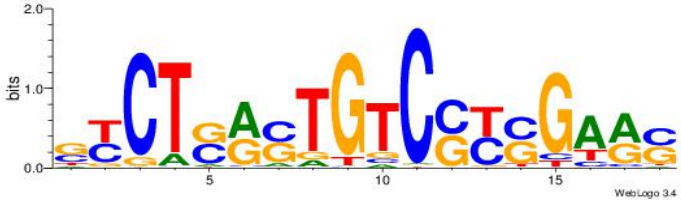


Reverse complement motif
Consensus sequence: BDDASATCAAAGGMDDD

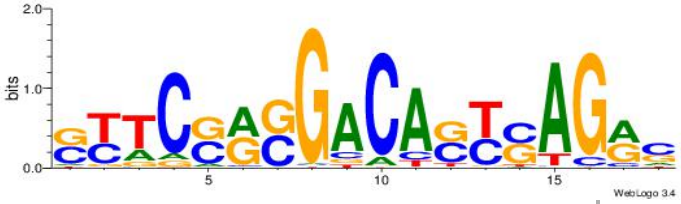


Dataset #: 1 Motif ID: 128 Motif name: C128

Original motif
Consensus sequence: SYCTSRSTGTCSYSGARS



Reverse complement motif
Consensus sequence: SKTCSMSGACASKSAGMS



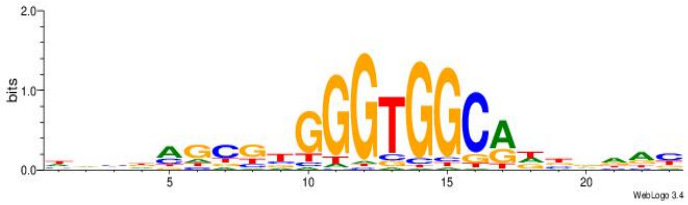
Best Matches for Motif ID 128 (Highest to Lowest)

Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward

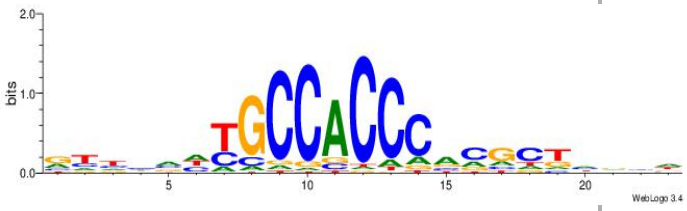
Position number: 1
Number of overlap: 18
Similarity score: 0.0345039

Alignment:
HVBDAGCGBGGGTGGCRDBDDDB
-----SYCTSRSTGTCSYSGARS

Original motif
Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH

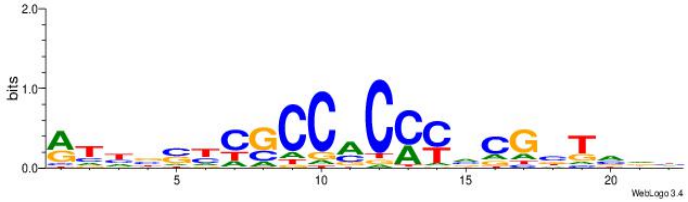


Motif ID: UP00539
Motif name: Gli2_v016060_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 1
Number of overlap: 18
Similarity score: 0.0355993

Alignment:
HDBABCGBKRGYGGCGMSBHAK
----SYCTSRSTGTCSYSGARS

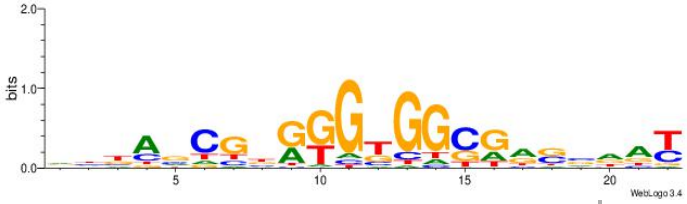
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



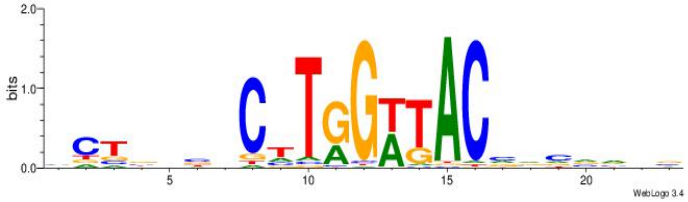
Motif ID:	UP00098
Motif name:	Rfx3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	18
Similarity score:	0.040905

Alignment:

```
VCTBHBVCTTGGWTACVVVVVDB
-----SYCTSRSTGTCSYSGARS
```

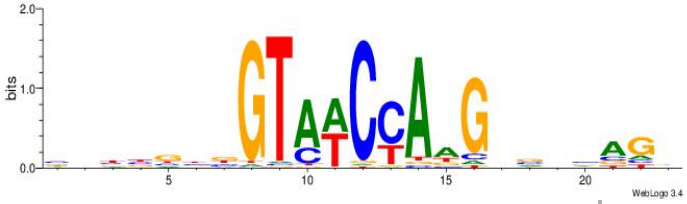
Original motif

Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB



Reverse complement motif

Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB



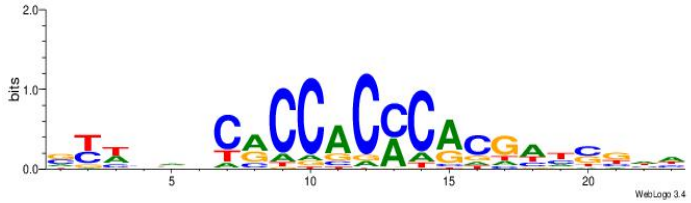
Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	18
Similarity score:	0.0416039

Alignment:

```
HHBSHTCGTGRGTGGKGDBVWMV
-----SYCTSRSTGTCSYSGARS
```

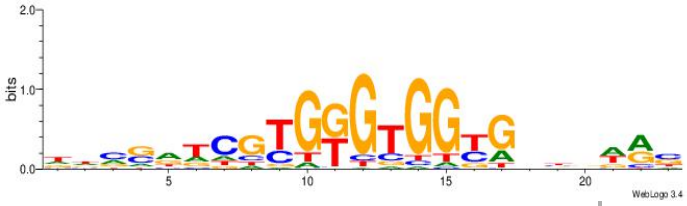
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV

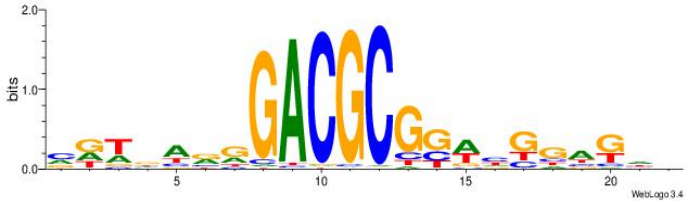


Motif ID:	UP00527
Motif name:	Foxn4_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward

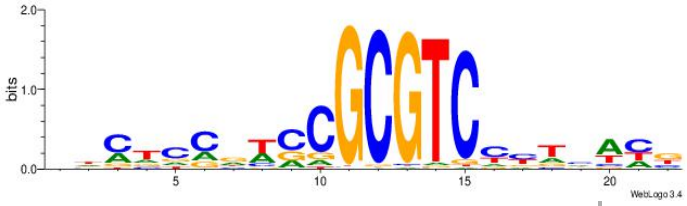
Position number: 1
Number of overlap: 18
Similarity score: 0.0436679

Alignment:
VDWDARRGACGCGGWHGGAKHV
SKTCSMSGACASKSAGMS----

Original motif
Consensus sequence: VDWDARRGACGCGGWHGGAKHV

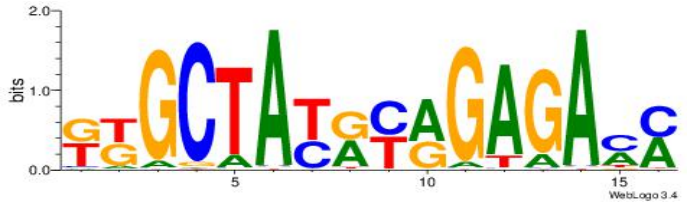


Reverse complement motif
Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV

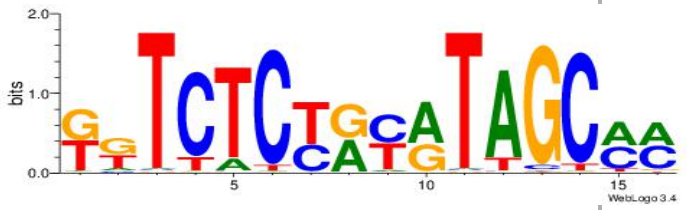


Dataset #: 1 Motif ID: 129 Motif name: C129

Original motif
Consensus sequence: KKGCTAYRYRGAGAMM



Reverse complement motif
Consensus sequence: RRTCTCKKMMTAGCRY



Best Matches for Motif ID 129 (Highest to Lowest)

Motif ID: UP00131
Motif name: Gbx2

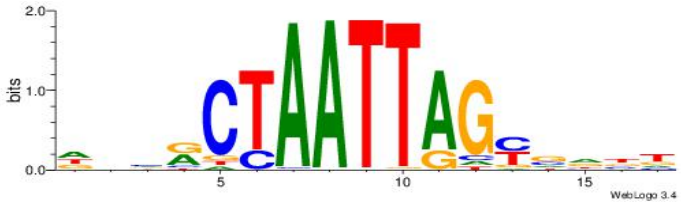
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	16
Similarity score:	0.0195892

Alignment:

```
DVDVKCTAATTAGMVVD
RRTCTCKKMMTAGCRY-
```

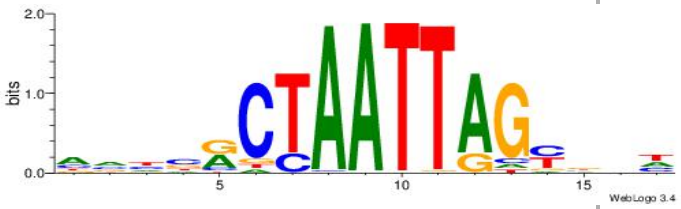
Original motif

Consensus sequence: DVVRCTAATTAGYVDBD



Reverse complement motif

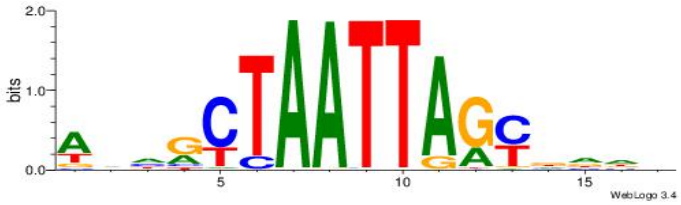
Consensus sequence: DVDVKCTAATTAGMVVD



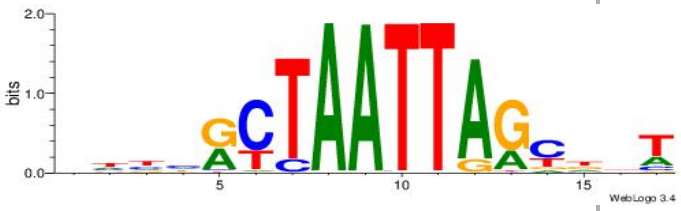
Motif ID:	UP00136
Motif name:	Prrx2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	16
Similarity score:	0.0328703

Alignment:
DDDHKCTAATTAGCHBT
RRTCTCKKMMTAGCRY-

Original motif
Consensus sequence: AVHGCTAATTAGYDDDD



Reverse complement motif
Consensus sequence: DDDHKCTAATTAGCHBT

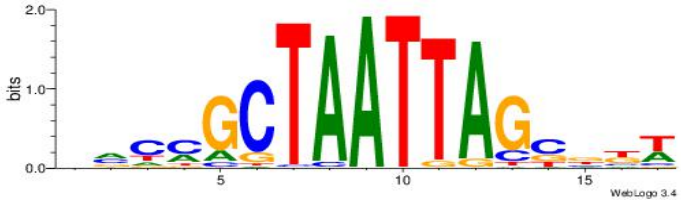


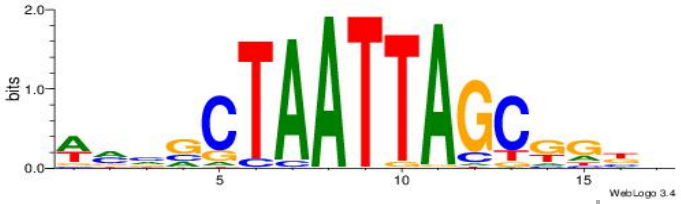
Motif ID:	UP00132
Motif name:	Evx2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	16
Similarity score:	0.0356184

Alignment:
BVCMGCTAATTAGCBKW
RRTCTCKKMMTAGCRY-

Original motif
Consensus sequence: BVCMGCTAATTAGCBKW

Reverse complement motif
Consensus sequence: WRBGCTAATTAGCRGBB





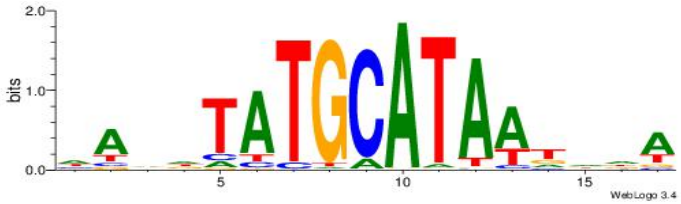
Motif ID:	UP00211
Motif name:	Pou3f3
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	16
Similarity score:	0.0360591

Alignment:

```
TDDATTATGCATADDTH
-KKGCTAYRYRGAGAMM
```

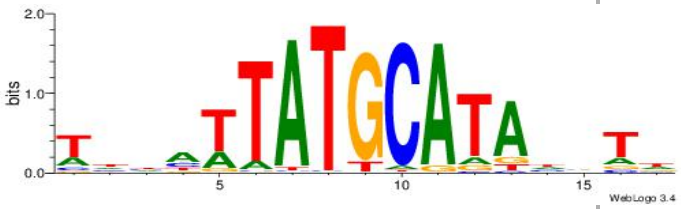
Original motif

Consensus sequence: HADDTATGCATAATDDA



Reverse complement motif

Consensus sequence: TDDATTATGCATADDTH



Motif ID:	UP00178

Motif name:	Og2x
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:	0.0365623

Alignment:

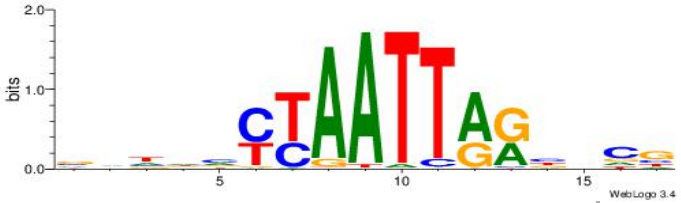
```
BHDHBMKAATTMKVVCG
RRTCTCKKMMTAGCRY-
```

Original motif

Consensus sequence: CGVVYYAATTRRBHDHB

Reverse complement motif

Consensus sequence: BHDHBMKAATTMKVVCG



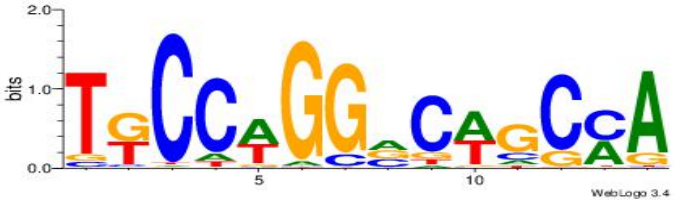
Dataset #: 1 Motif ID: 130 Motif name: C130

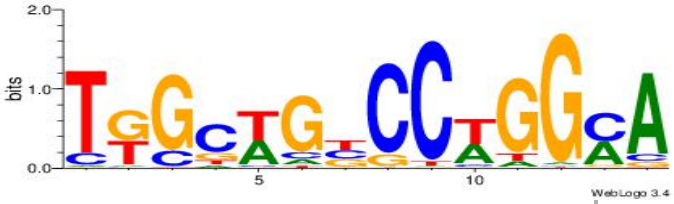
Original motif

Consensus sequence: TKCCWGGVCWGCMA

Reverse complement motif

Consensus sequence: TRGCWGBCCWGGYA





Best Matches for Motif ID 130 (Highest to Lowest)

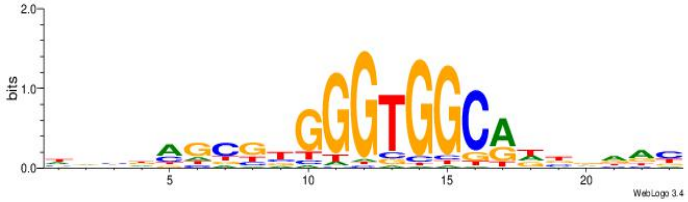
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	9
Number of overlap:	14
Similarity score:	0.0417596

Alignment:

```
BDDHVDKGCCACCCVCGCTDBVH
-TKCCWGGVCWGCMA--------
```

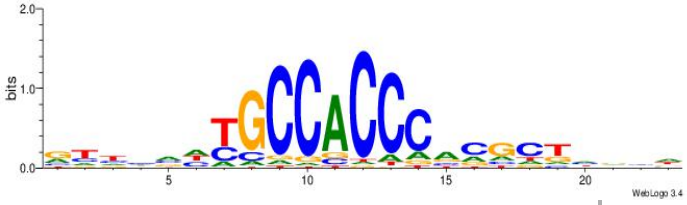
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



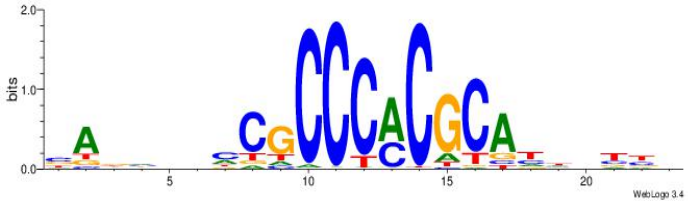
Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	14
Similarity score:	0.0438533

Alignment:

```
VVVDHHTGCGYGGGCGDHVHHTB
------TKCCWGGVCWGCMA---
```

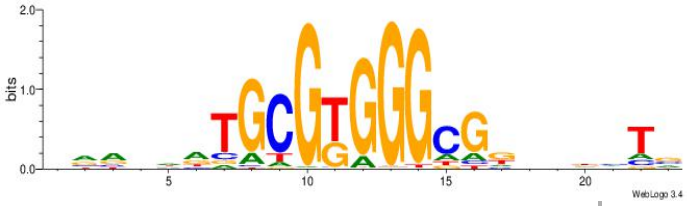
Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif

Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB

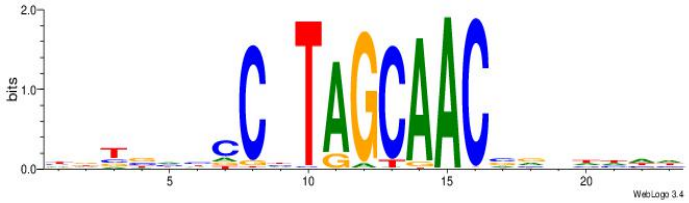


Motif ID:	UP00098
Motif name:	Rfx3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1

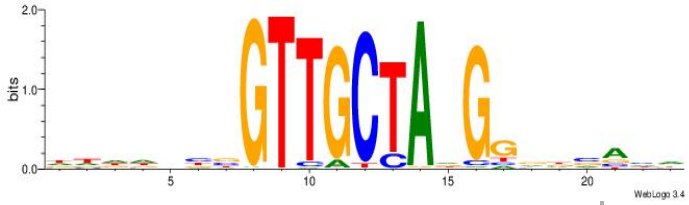
Number of overlap: 14
Similarity score: 0.0449212

Alignment:
HDTBHHCCHTAGCAACVVDHHHH
TRGCWGBCCWGGYA---------

Original motif
Consensus sequence: HDTBHHCCHTAGCAACVVDHHHH



Reverse complement motif
Consensus sequence: HHHHDVVGTTGCTAHGGDHBAHH



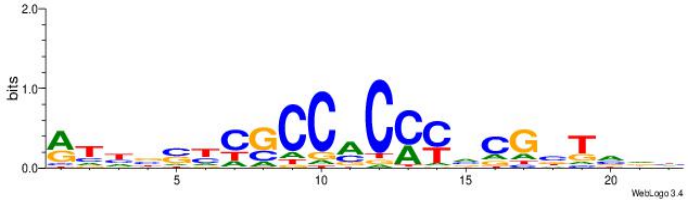
Motif ID: UP00539
Motif name: Gli2_v016060_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 2
Number of overlap: 14
Similarity score: 0.0463369

Alignment:
HDBABCGBKRGYGGCGMSBHAK
-------TKCCWGGVCWGCMA-

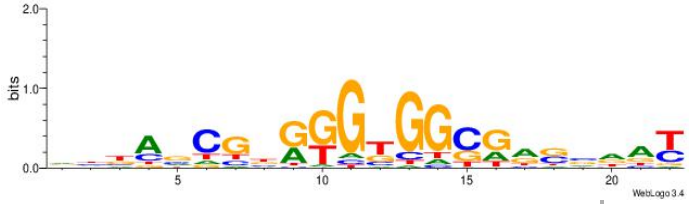
Original motif

Reverse complement motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



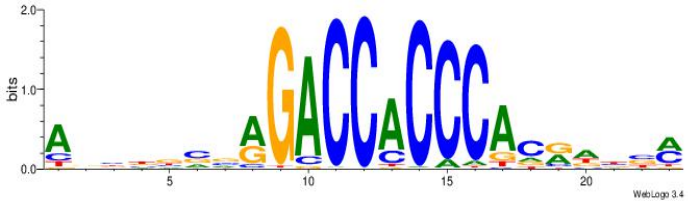
Motif ID:	UP00540
Motif name:	Gli3_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	14
Similarity score:	0.0472891

Alignment:

```
YBVDMGTGGGTGGTCKVVBVBBT
------TRGCWGBCCWGGYA---
```

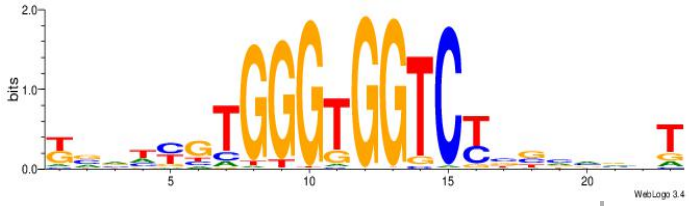
Original motif

Consensus sequence: ABBBBVVRGACCACCCACRDBBM



Reverse complement motif

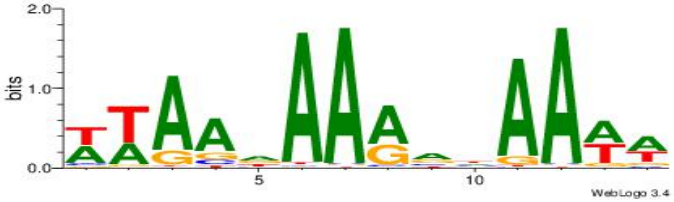
Consensus sequence: YBVDMGTGGGTGGTCKVVBVBBT



Dataset #: 1 **Motif ID: 131** **Motif name: C131**

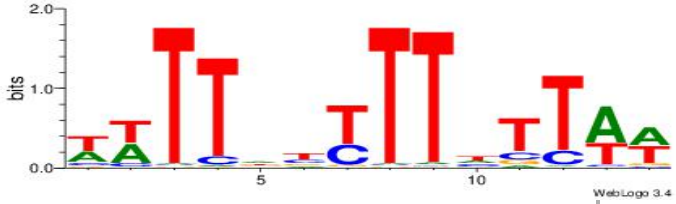
Original motif

Consensus sequence: WWAADAARVHAAWW



Reverse complement motif

Consensus sequence: WWTTHBKTTDTTWW



Best Matches for Motif ID 131 (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:	2
Number of overlap:	14
Similarity score:	0.0256716

Alignment:

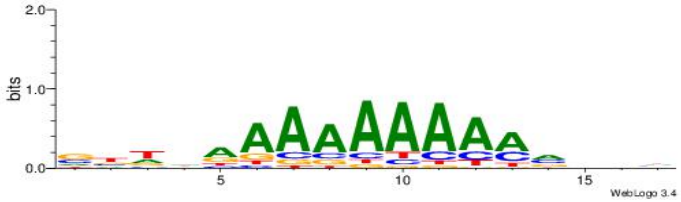
```
VBDDAAAAAAAAMVBHH
--WWAADAARVHAAWW-
```

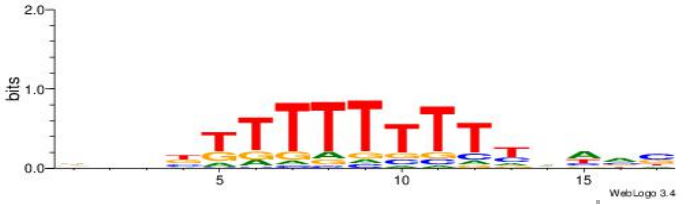
Original motif

Consensus sequence: VBDDAAAAAAAAMVBHH

Reverse complement motif

Consensus sequence: HHVBYTTTTTTTTDDVV





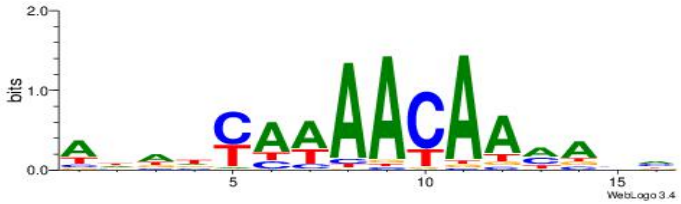
Motif ID:	UP00061
Motif name:	Foxl1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	14
Similarity score:	0.0279274

Alignment:

```
HDTYTTGTTWTKDDDT
WWTTHBKTTDTTWW--
```

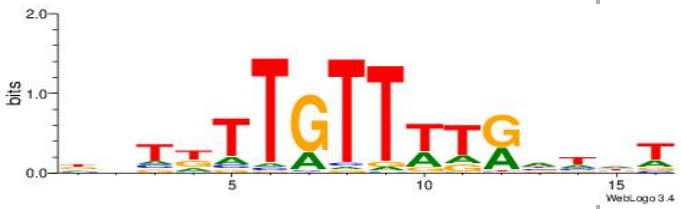
Original motif

Consensus sequence: ADDDYAWAACAAMAHH



Reverse complement motif

Consensus sequence: HDTYTTGTTWTKDDDT



Motif ID:	UP00028

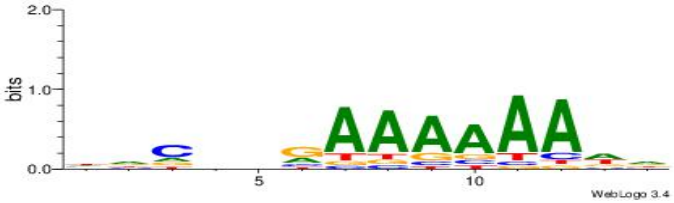
Motif name:	Tcfap2e_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0294273

Alignment:

```
HDCDBRAAAAAADD
WWAADAARVHAAWW
```

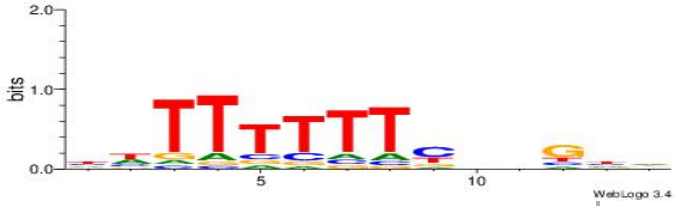
Original motif

Consensus sequence: HDCDBRAAAAAADD



Reverse complement motif

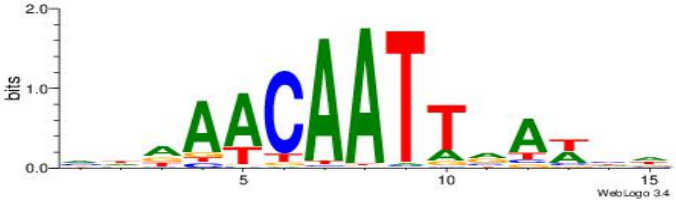
Consensus sequence: DDTTTTTTMBDGDH



Motif ID:	UP00014
Motif name:	Sox17_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:	0.0331143

Alignment:
DDWTBAATTGTTDDB
WWTTHBKTTDTTWW-

Original motif
Consensus sequence: VDDAACAATTVAWHD



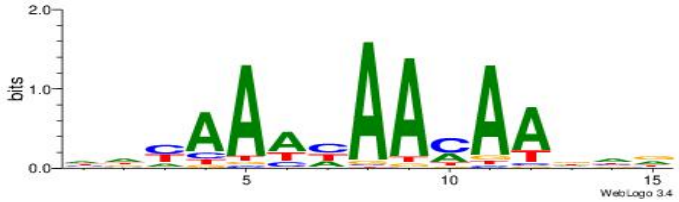
Reverse complement motif
Consensus sequence: DDWTBAATTGTTDDB

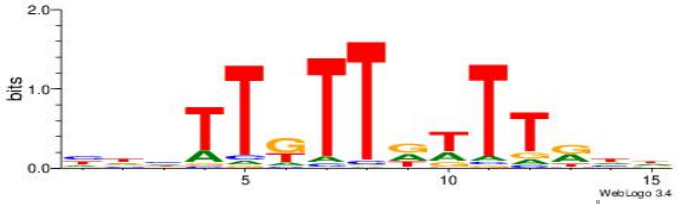
Motif ID:	UP00037
Motif name:	Zfp105_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0331856

Alignment:
HHHTTRTTDTTTKDH
-WWTTHBKTTDTTWW

Original motif
Consensus sequence: HDYAAAHAAMAADHD

Reverse complement motif
Consensus sequence: HHHTTRTTDTTTKDH

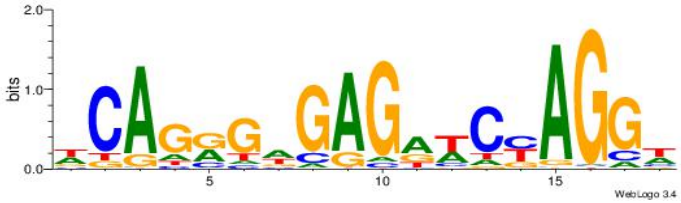




Dataset #: 1 Motif ID: 132 Motif name: C132

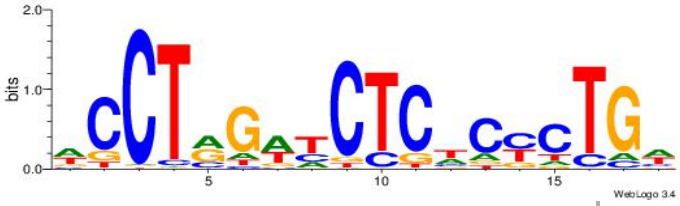
Original motif

Consensus sequence: WCAGRGWGAGAWCYAGGW



Reverse complement motif

Consensus sequence: WCCTKGWTCTCWCMCTGW



Best Matches for Motif ID 132 (Highest to Lowest)

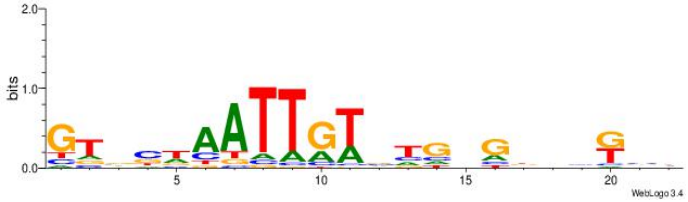
Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	18
Similarity score:	0.0464813

Alignment:

```
VVYDDDCHCAVACAATTDBVAC
WCCTKGWTCTCWCMCTGW----
```

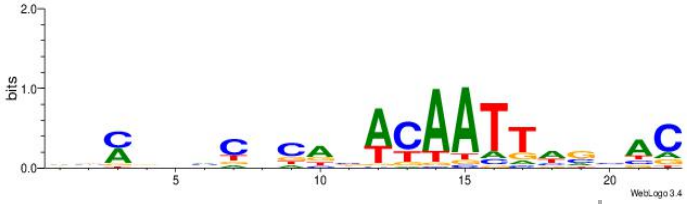
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif

Consensus sequence: VVYDDDCHCAVACAATTDBVAC



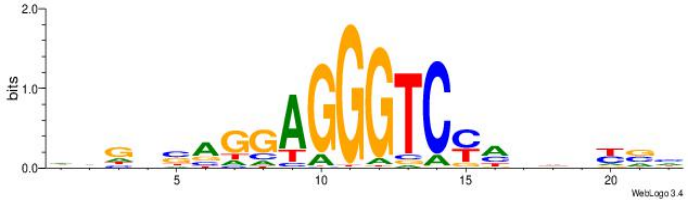
Motif ID:	UP00539
Motif name:	Gli2_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	18
Similarity score:	0.0491336

Alignment:

```
HVGVSAGGAGGGTCYHHHHYVH
-WCAGRGWGAGAWCYAGGW---
```

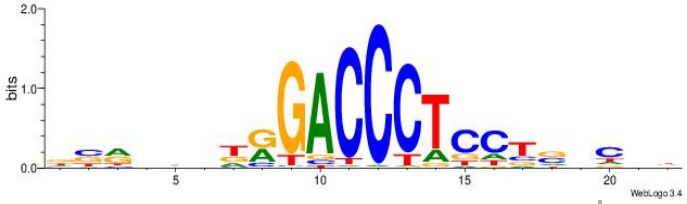
Original motif

Consensus sequence: HVGVSAGGAGGGTCYHHHHYVH



Reverse complement motif

Consensus sequence: DVMHHDHKGACCCTCCTSVCBH



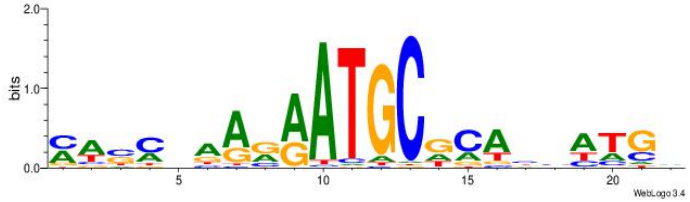
Motif ID:	UP00528
Motif name:	Foxm1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	18
Similarity score:	0.0511816

Alignment:

```
DCATDBTGHGCATKMTTBRSWR
WCCTKGWTCTCWCMCTGW----
```

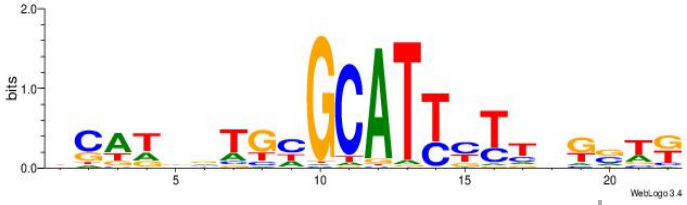
Original motif

Consensus sequence: MWSMBAARRATGCDCABHATGD



Reverse complement motif

Consensus sequence: DCATDBTGHGCATKMTTBRSWR

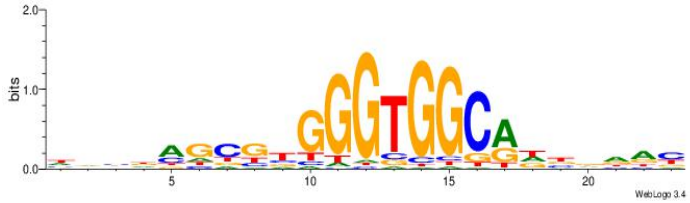


Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4

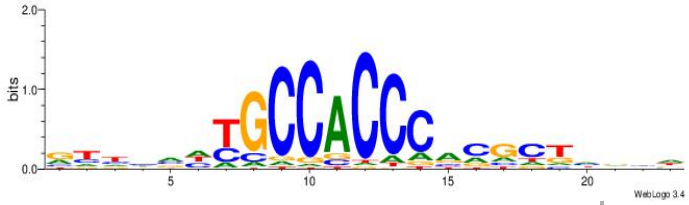
Number of overlap: 18
Similarity score: 0.0524801

Alignment:
HVBDAGCGBGGGTGGCRDBDDDB
--WCAGRGWGAGAWCYAGGW---

Original motif
Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



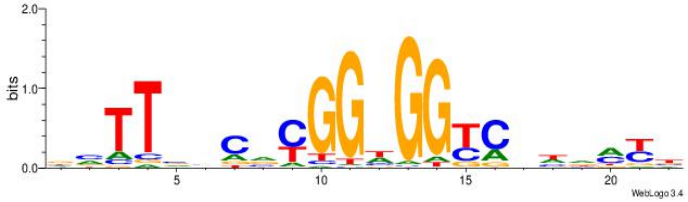
Motif ID: UP00540
Motif name: Gli3_v015681_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 2
Number of overlap: 18
Similarity score: 0.0525963

Alignment:
DVTTVVCVYGGHGGYCHHDMYB
---WCAGRGWGAGAWCYAGGW-

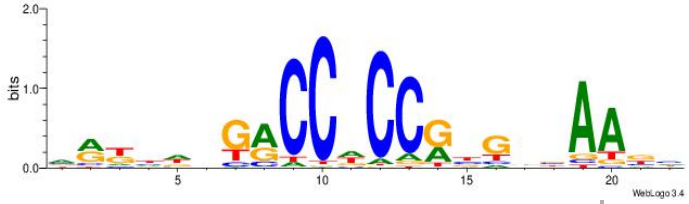
Original motif

Reverse complement motif

Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



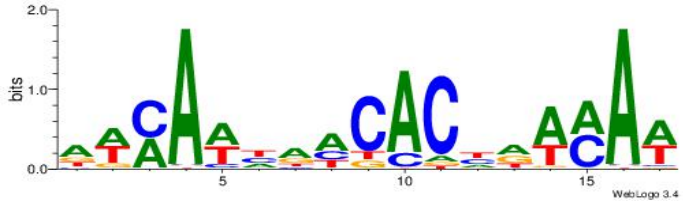
Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH



Dataset #: 1 **Motif ID: 133** **Motif name: C133**

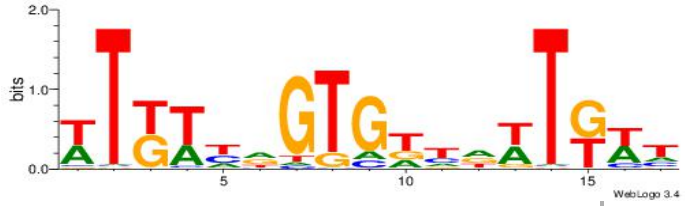
Original motif

Consensus sequence: AWMAWHDACACHRWMAW



Reverse complement motif

Consensus sequence: WTYWKHGTGTDHWTRWT

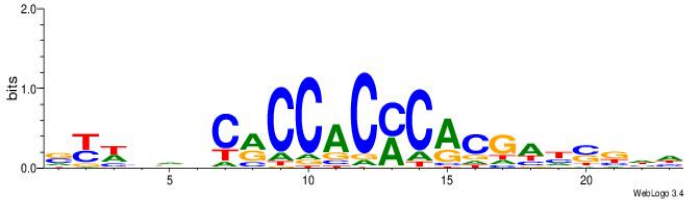


Best Matches for Motif ID 133 (Highest to Lowest)

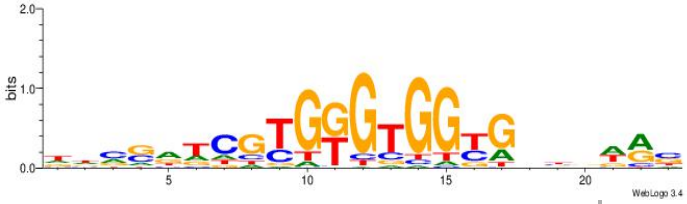
Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	17
Similarity score:	0.039607

Alignment:
VYWVVHCRCCACMCACGAHSBHH
-AWMAWHDACACHRWMAW-----

Original motif
Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif
Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV

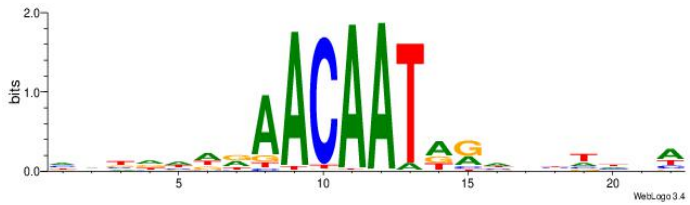


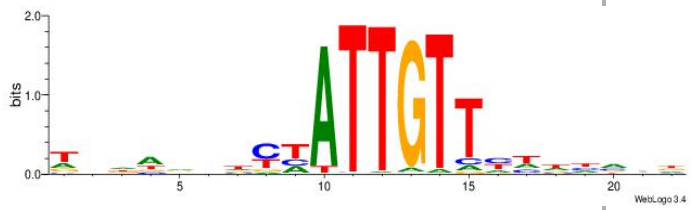
Motif ID:	UP00034
Motif name:	Sox7_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	17
Similarity score:	0.0412538

Alignment:
WBHHHHHMDATTGTTHDHDVHH
----WTYWKHGTGTDHWTRWT-

Original motif
Consensus sequence: HHBDHDDAACAATDRHHHHHBW

Reverse complement motif
Consensus sequence: WBHHHHHMDATTGTTHDHDVHH





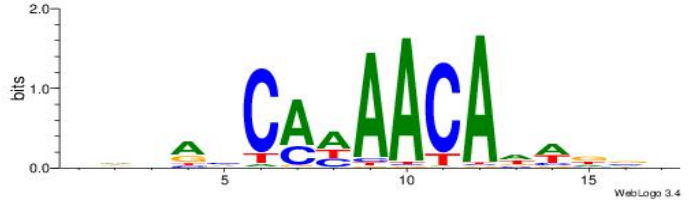
Motif ID:	UP00039
Motif name:	Foxj3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	17
Similarity score:	0.0441279

Alignment:

```
DVHWDTGTTWTGDTBDH
WTYWKHGTGTDHWTRWT
```

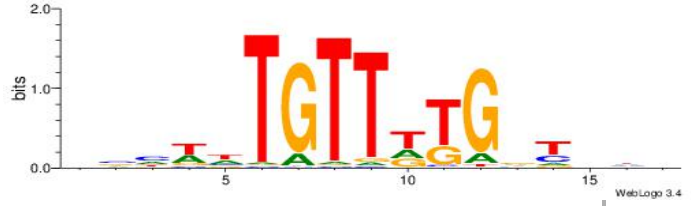
Original motif

Consensus sequence: HDBAHCAWAACADWDVD



Reverse complement motif

Consensus sequence: DVHWDTGTTWTGDTBDH



Motif ID:	UP00119

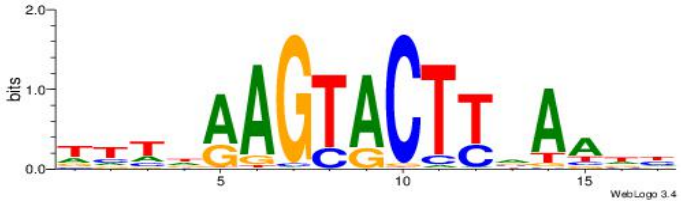
Motif name:	Nkx2-9
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	17
Similarity score:	0.0448373

Alignment:

```
TTTDAAGTACTTVAADH
WTYWKHGTGTDHWTRWT
```

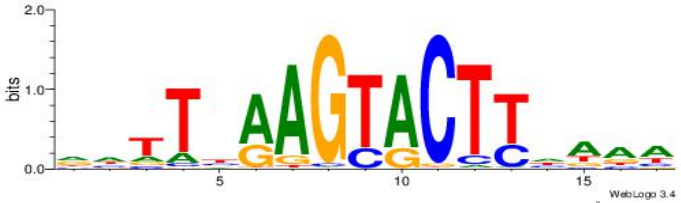
Original motif

Consensus sequence: TTTDAAGTACTTVAADH



Reverse complement motif

Consensus sequence: HDTTBAAGTACTTDAAA

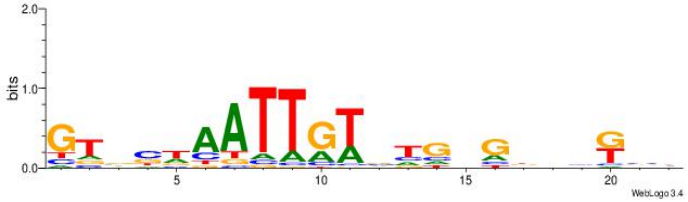


Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	17

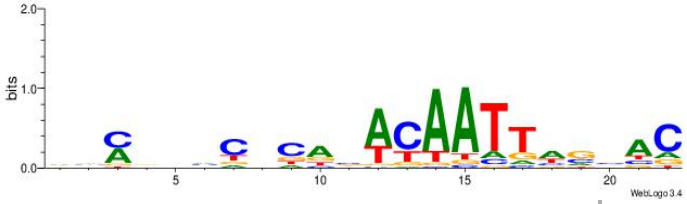
Similarity score: 0.0454758

Alignment:
GTVBDAATTGTVTGHGDDHKVB
-WTYWKHGTGTDHWTRWT----

Original motif
Consensus sequence: GTVBDAATTGTVTGHGDDHKVB

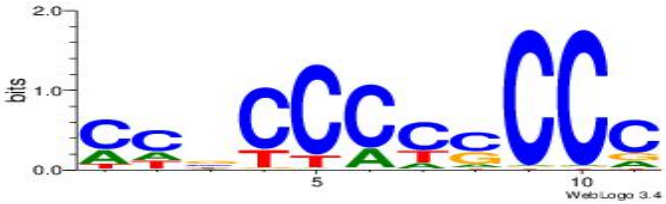


Reverse complement motif
Consensus sequence: VVYDDDCHCAVACAATTDBVAC



Dataset #: 1 Motif ID: 134 Motif name: C134

Original motif
Consensus sequence: CCBCCCCSCCC



Reverse complement motif
Consensus sequence: GGGSGGGGBGG

Best Matches for Motif ID 134 (Highest to Lowest)

Motif ID:	UP00021
Motif name:	Zfp281_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement

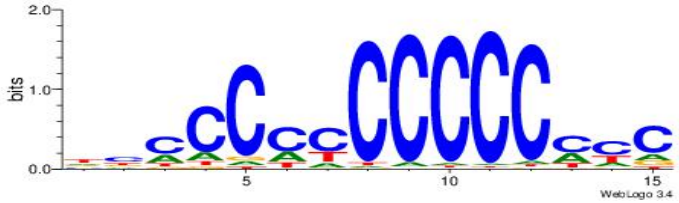
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.00418064

Alignment:

```
GKRGGGGGGGGGGBD
----GGGSGGGGBGG
```

Original motif

Consensus sequence: DBCCCCCCCCCCMYC



Reverse complement motif

Consensus sequence: GKRGGGGGGGGGGBD

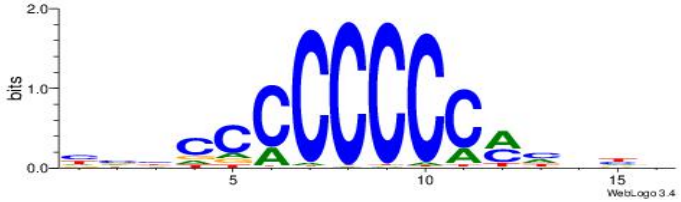
Motif ID:	UP00022
Motif name:	Zfp740_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.0057444

Alignment:

```
BHHDYGGGGGGGGBVD
-----GGGSGGGGBGG
```

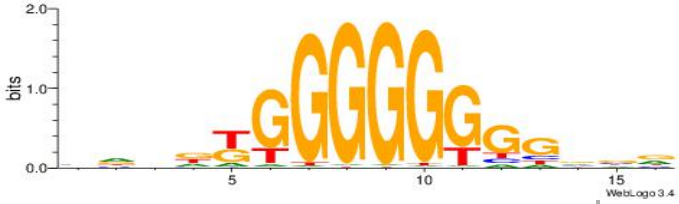
Original motif

Consensus sequence: HVBCCCCCCCCMHHHB



Reverse complement motif

Consensus sequence: BHHDYGGGGGGGGBVD



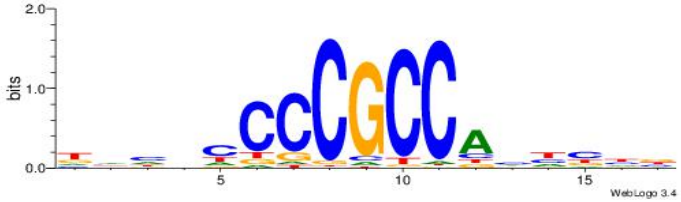
Motif ID:	UP00000
Motif name:	Smad3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.0142081

Alignment:

```
DHHBCCCCGCCAHHBHB
-CCBCCCCSCCC-----
```

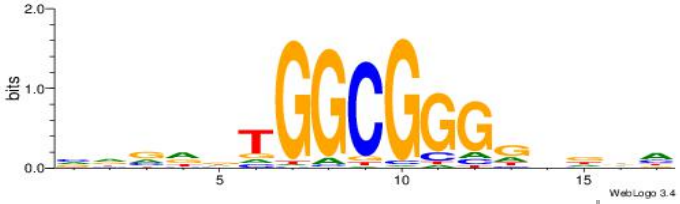
Original motif

Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif

Consensus sequence: BHBHDTGGCGGGGBDHD



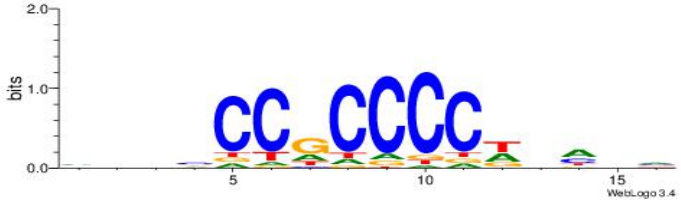
Motif ID:	UP00043
Motif name:	Bcl6b_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0188242

Alignment:

```
HBBBCCGCCCCWHHHV
CCBCCCCSCCC-----
```

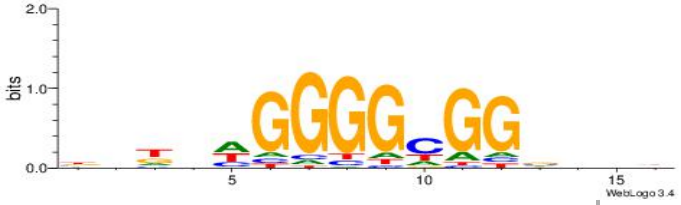
Original motif

Consensus sequence: HBBBCCGCCCCWHHHV



Reverse complement motif

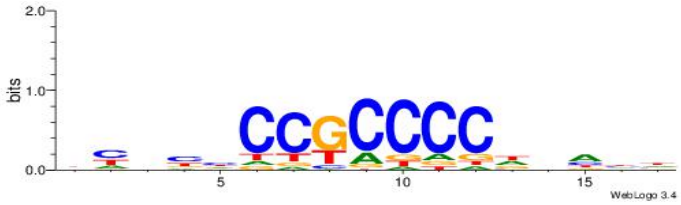
Consensus sequence: BHHHWGGGGCGGBBVH



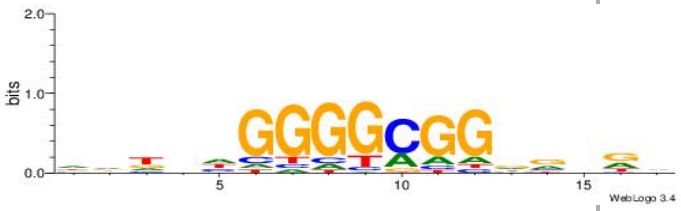
Motif ID:	UP00033
Motif name:	Zfp410_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.0189121

Alignment:
HHHHDGGGGCGGDBHDV
------GGGSGGGGBGG

Original motif
Consensus sequence: BHHBHCCGCCCCDHHHH

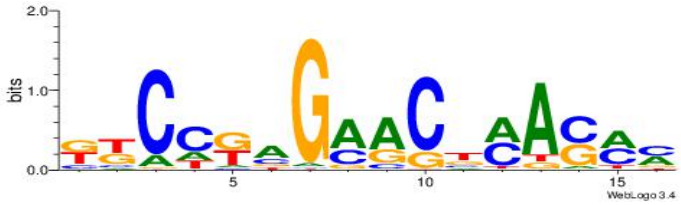


Reverse complement motif
Consensus sequence: HHHHDGGGGCGGDBHDV

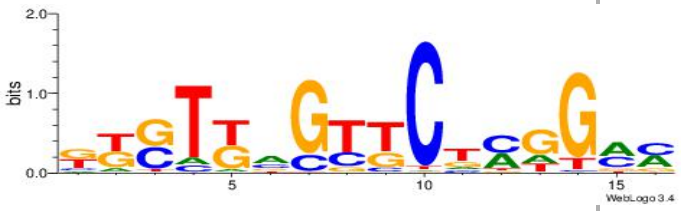


Dataset #: 1 Motif ID: 135 Motif name: C135

Original motif
Consensus sequence: KKCCKAGMACBMASMM



Reverse complement motif
Consensus sequence: RYSTYVGTYCTYGGRY



Best Matches for Motif ID 135 (Highest to Lowest)

Motif ID:	UP00390
Motif name:	Tcf1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement

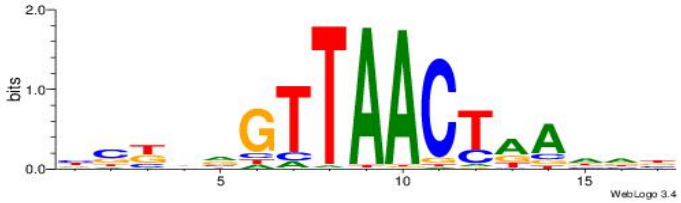
Direction:	Forward
Position number:	1
Number of overlap:	16
Similarity score:	0.0428575

Alignment:

```
VDDTTAGTTAACBVRSD
RYSTYVGTYCTYGGRY-
```

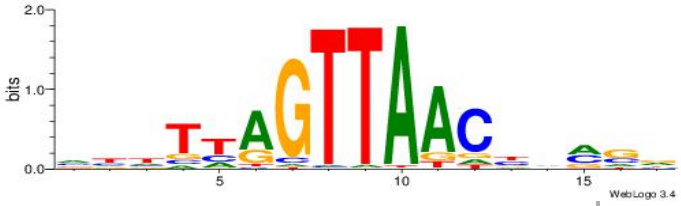
Original motif

Consensus sequence: HSKBVGTTAACTAADDB



Reverse complement motif

Consensus sequence: VDDTTAGTTAACBVRSD



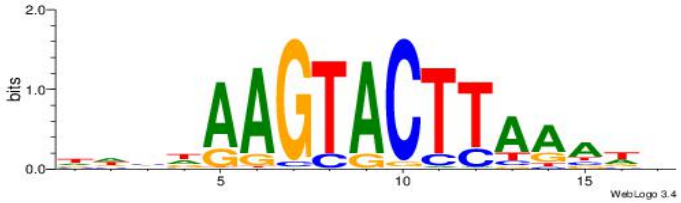
Motif ID:	UP00389
Motif name:	Nkx3-1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	16
Similarity score:	0.0437525

Alignment:

BDTTTAAGTACTTDDDD
-RYSTYVGTYCTYGGRY

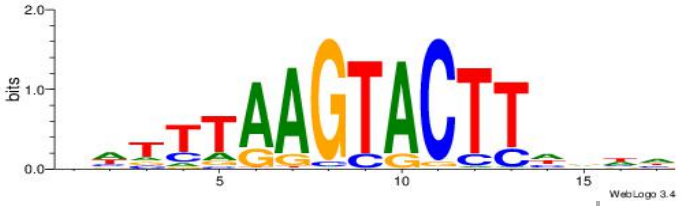
Original motif

Consensus sequence: DDHDAAGTACTTAAADB



Reverse complement motif

Consensus sequence: BDTTTAAGTACTTDDDD



Motif ID:	UP00100
Motif name:	Gata6_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:	16
Similarity score:	0.0456644

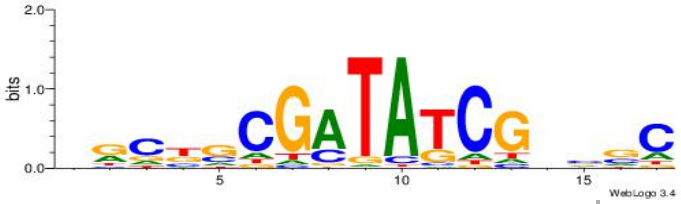
Alignment:
GBBVCGATATCGSVGYD
-KKCCKAGMACBMASMM

Original motif

Consensus sequence: GBBVCGATATCGSVGYD

Reverse complement motif

Consensus sequence: HKCBSCGATATCGVBBC



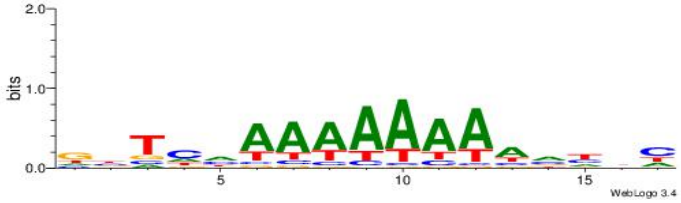
Motif ID:	UP00090
Motif name:	Elf3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	16
Similarity score:	0.0458473

Alignment:

```
DDHBTTTTTTTTHDAVH
-RYSTYVGTYCTYGGRY
```

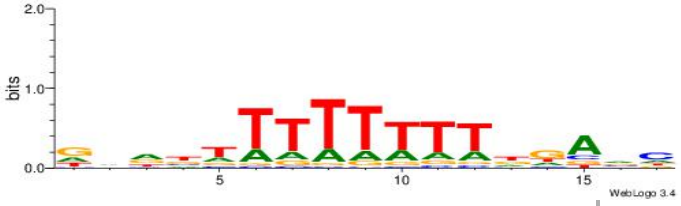
Original motif

Consensus sequence: DBTHHAAAAAAAAVHDH



Reverse complement motif

Consensus sequence: DDHBTTTTTTTTHDAVH



Motif ID:	UP00053

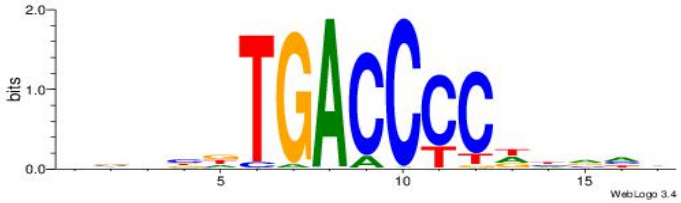
Motif name:	Rxra_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	16
Similarity score:	0.0463964

Alignment:

```
DBHBDTGACCCCDHVHB
KKCCKAGMACBMASMM-
```

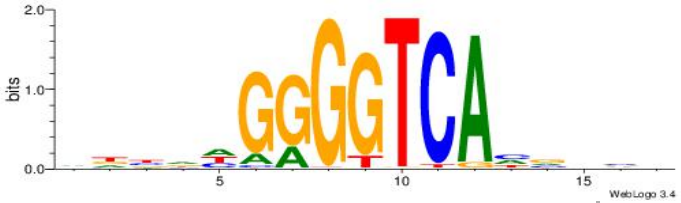
Original motif

Consensus sequence: DBHBDTGACCCCDHVHB



Reverse complement motif

Consensus sequence: VHBHDGGGGTCAHBHBD



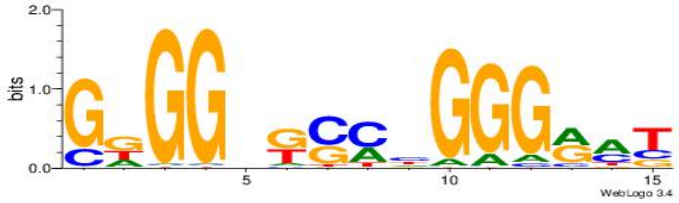
Dataset #: 1 Motif ID: 136 Motif name: C136

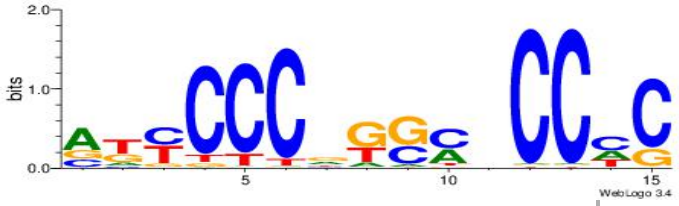
Original motif

Consensus sequence: GDGGVKSMHGGGRMT

Reverse complement motif

Consensus sequence: AYKCCCDRSYVCCHC





Best Matches for Motif ID 136 (Highest to Lowest)

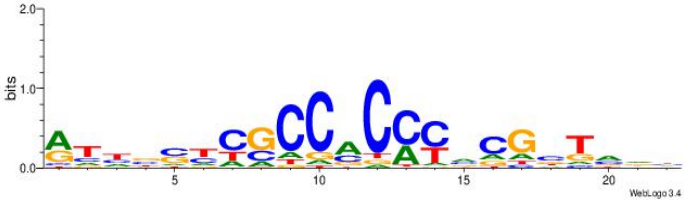
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	8
Number of overlap:	15
Similarity score:	0.0296869

Alignment:

```
RTHBSYCGCCMCMYVCGBTVDH
AYKCCCDRSYVCCHC-------
```

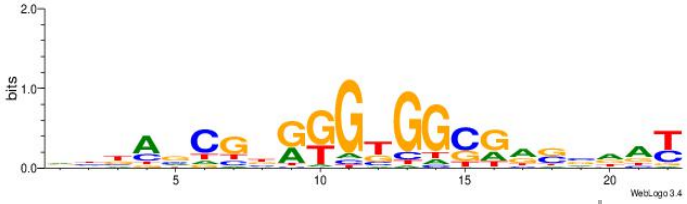
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



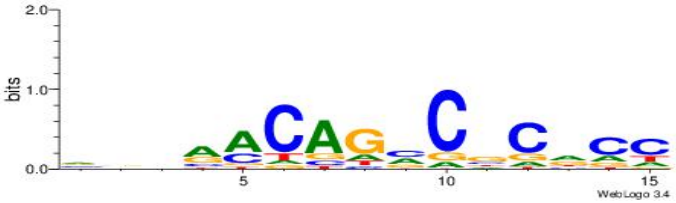
Motif ID:	UP00036
Motif name:	Myf6_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	15
Similarity score:	0.0329478

Alignment:

```
GGDGBGVCTGTKVVB
GDGGVKSMHGGGRMT
```

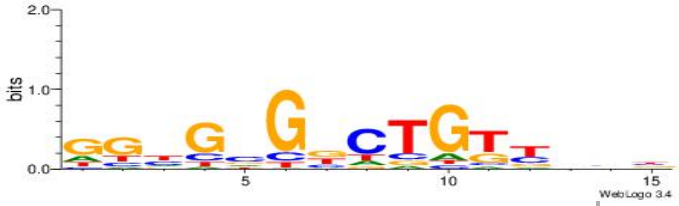
Original motif

Consensus sequence: VVVRACAGVCBCDCC



Reverse complement motif

Consensus sequence: GGDGBGVCTGTKVVB

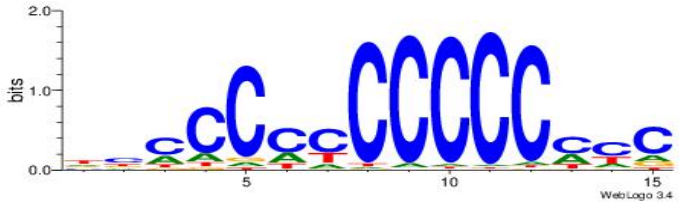


Motif ID:	UP00021
Motif name:	Zfp281_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	15

Similarity score: 0.0360132

Alignment:
DBCCCCCCCCCCMYC
GDGGVKSMHGGGRMT

Original motif
Consensus sequence: DBCCCCCCCCCCMYC



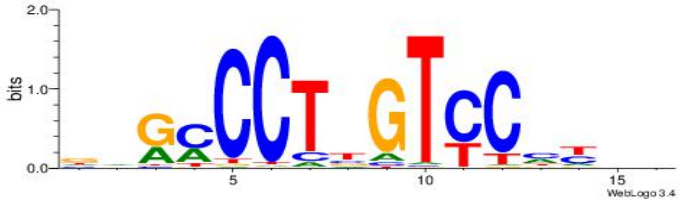
Reverse complement motif
Consensus sequence: GKRGGGGGGGGGBD

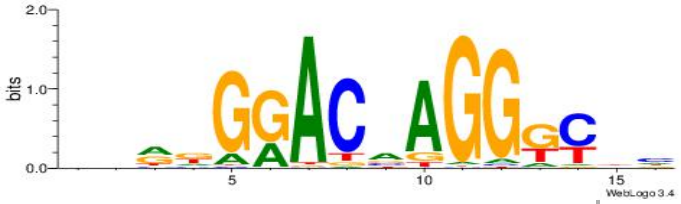
Motif ID: UP00082
Motif name: Zfp187_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 15
Similarity score: 0.0383817

Alignment:
VHMDGGACVAGGRCDH
AYKCCCDRSYVCCHC-

Original motif
Consensus sequence: DDGMCCTBGTCCHYHV

Reverse complement motif
Consensus sequence: VHMDGGACVAGGRCDH





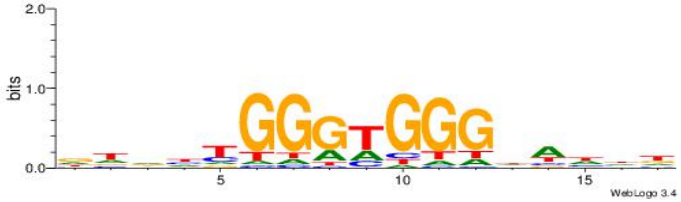
Motif ID:	UP00096
Motif name:	Sox13_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	15
Similarity score:	0.0391249

Alignment:

```
DDDHTGGGTGGGHAHHD
GDGGVKSMHGGGRMT--
```

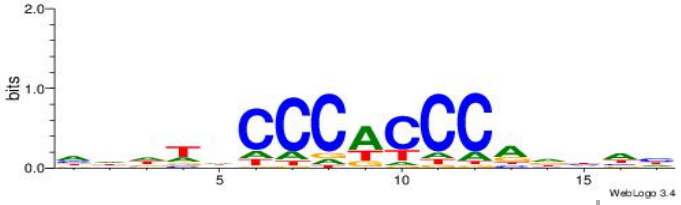
Original motif

Consensus sequence: DDDHTGGGTGGGHAHHD



Reverse complement motif

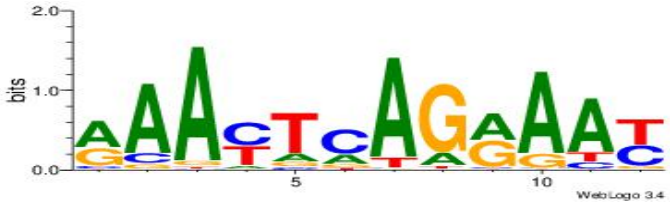
Consensus sequence: DHHTHCCCACCCAHDDH



Dataset #: 1 Motif ID: 137 Motif name: C137

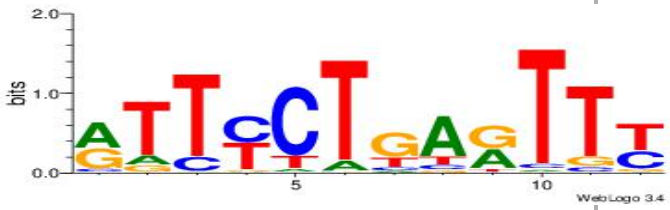
Original motif

Consensus sequence: RAAYTCAGRAAY



Reverse complement motif

Consensus sequence: MTTKCTGAKTTK



Best Matches for Motif ID 137 (Highest to Lowest)

Motif ID:	UP00085
Motif name:	Sfpi1_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:	0.00902566

Alignment:

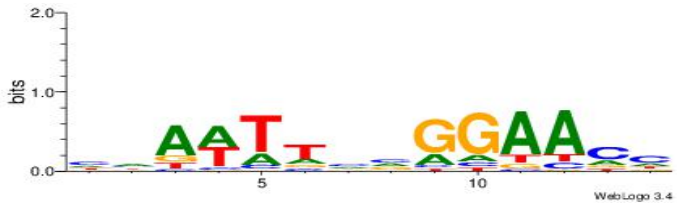
```
HHAWTTHVGGAACH
-RAAYTCAGRAAY-
```

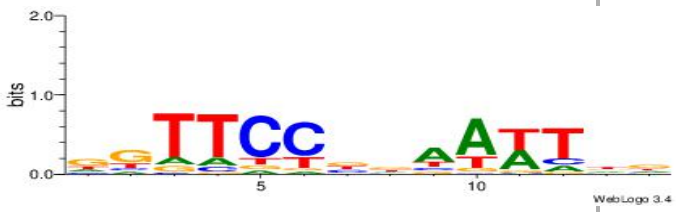
Original motif

Consensus sequence: HHAWTTHVGGAACH

Reverse complement motif

Consensus sequence: DGTTCCVDAAWTHD





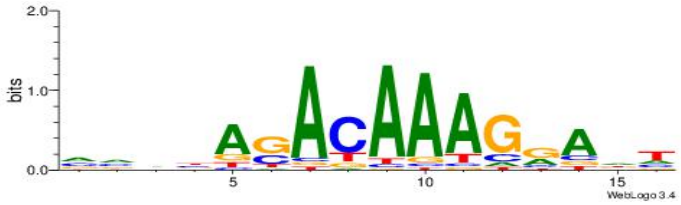
Motif ID:	UP00101
Motif name:	Sox12_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	12
Similarity score:	0.0179124

Alignment:

```
VVDBASACAAAGRADH
----RAAYTCAGRAAY
```

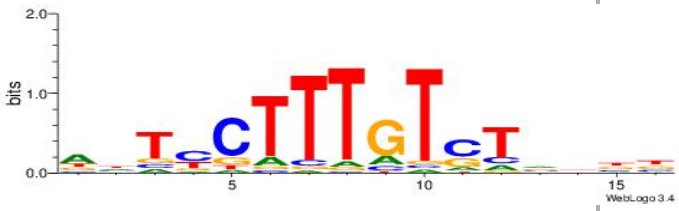
Original motif

Consensus sequence: VVDBASACAAAGRADH



Reverse complement motif

Consensus sequence: HDTMCTTTGTSTVDBB



Motif ID:	UP00185

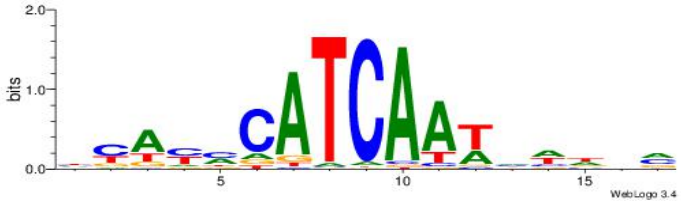
Motif name:	Pbx1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	12
Similarity score:	0.0179708

Alignment:

```
BVDWHWTTGATGRKTKH
-----MTTKCTGAKTTK
```

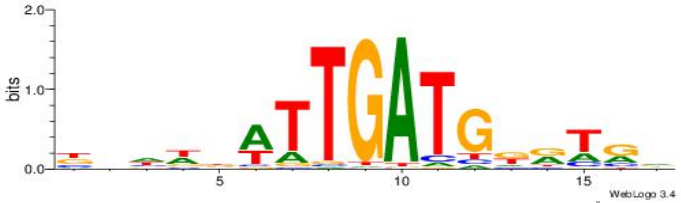
Original motif

Consensus sequence: HYAYMCATCAAWHWDVV



Reverse complement motif

Consensus sequence: BVDWHWTTGATGRKTKH

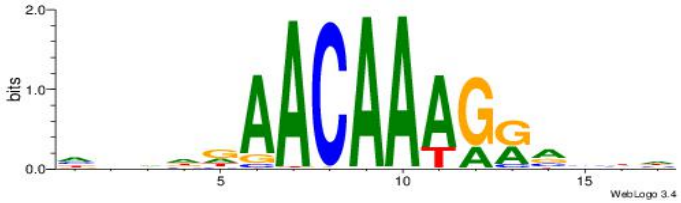


Motif ID:	UP00062
Motif name:	Sox4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	12

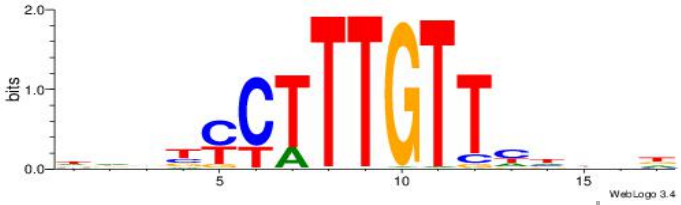
Similarity score: 0.0209132

Alignment:
HBDDDAACAAAGRVBHH
----RAAYTCAGRAAY-

Original motif
Consensus sequence: HBDDDAACAAAGRVBHH



Reverse complement motif
Consensus sequence: HHBBMCTTTGTTHDDBH

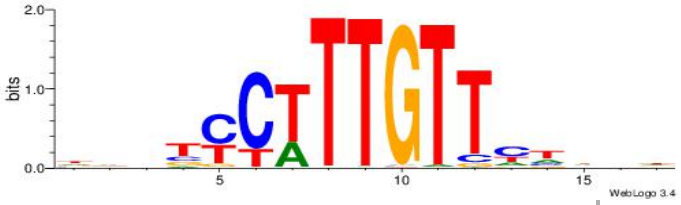


Motif ID: UP00030
Motif name: Sox11_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 5
Number of overlap: 12
Similarity score: 0.0212068

Alignment:
HBDDRAACAAAGRABHH
----RAAYTCAGRAAY-

Original motif
Consensus sequence: HBDDRAACAAAGRABHH

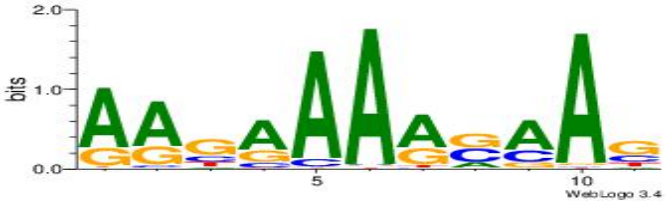
Reverse complement motif
Consensus sequence: HHBTMCTTTGTTMDDVH



Dataset #: 1 **Motif ID: 138** **Motif name: C138**

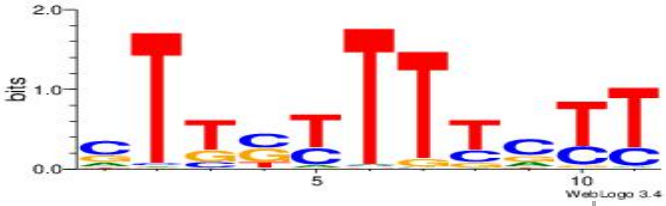
Original motif

Consensus sequence: AAGAAARSAAG



Reverse complement motif

Consensus sequence: CTTSKTTTCTT



Best Matches for Motif ID 138 (Highest to Lowest)

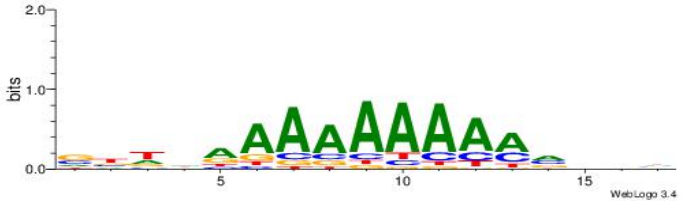
Motif ID:	UP00077
Motif name:	Srf_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	11
Similarity score:	0.0334943

Alignment:

HHVBYTTTTTTTTDDVV
--CTTSKTTTCTT----

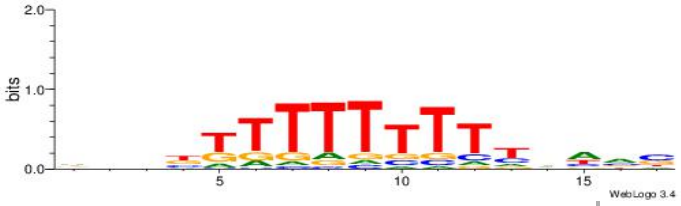
Original motif

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:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.0441276

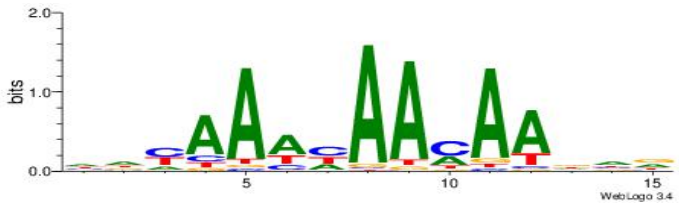
Alignment:
HHHTTRTTDTTTKDH
--CTTSKTTTCTT--

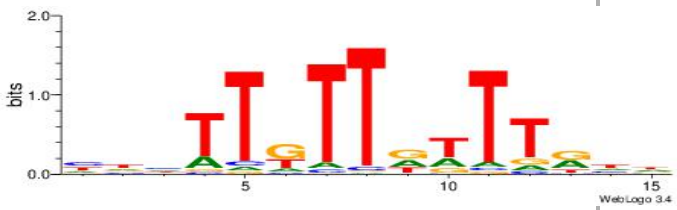
Original motif

Consensus sequence: HDYAAAHAAMAADHD

Reverse complement motif

Consensus sequence: HHHTTRTTDTTTKDH





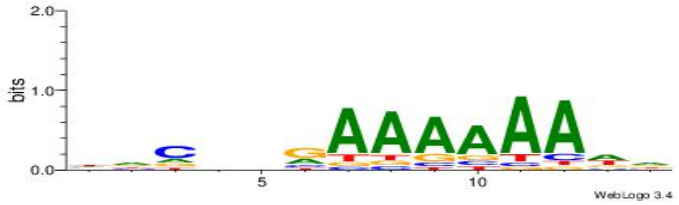
Motif ID:	UP00028
Motif name:	Tcfap2e_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.0449117

Alignment:

```
HDCDBRAAAAAADD
--AAGAAARSAAG-
```

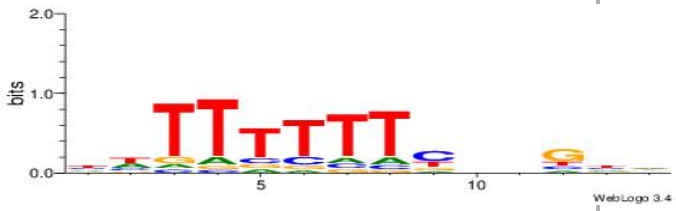
Original motif

Consensus sequence: HDCDBRAAAAAADD



Reverse complement motif

Consensus sequence: DDTTTTTTMBDGDH



Motif ID:	UP00171

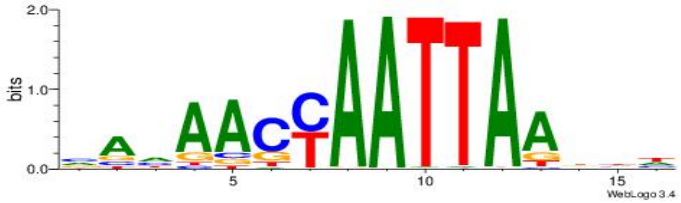
Motif name:	Msx3
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.0452028

Alignment:

```
HHVTTAATTKGTTHTV
--CTTSKTTTCTT---
```

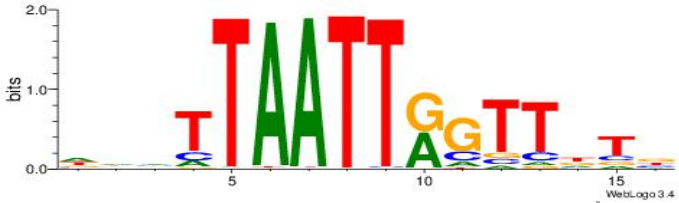
Original motif

Consensus sequence: VAHAACYAATTAABHH



Reverse complement motif

Consensus sequence: HHVTTAATTKGTTHTV

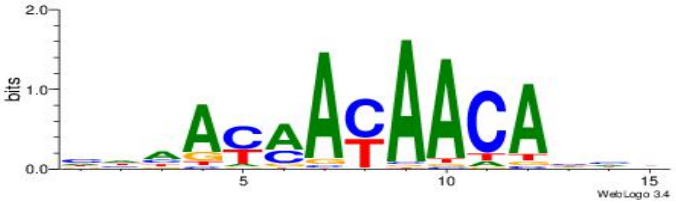


Motif ID:	UP00025
Motif name:	Foxk1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	11

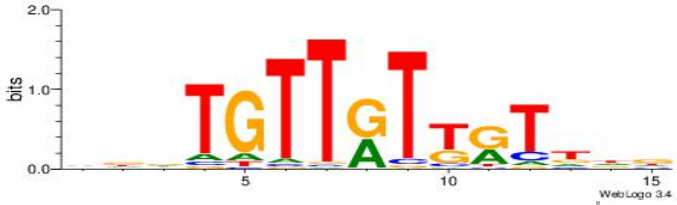
Similarity score: 0.0456684

Alignment:
HDDTGTTKTTKTHHD
-CTTSKTTTCTT---

Original motif
Consensus sequence: HHHAYAAYAACAHHH

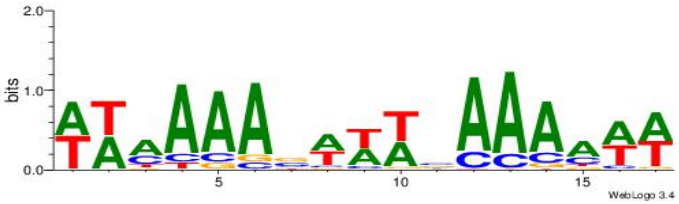


Reverse complement motif
Consensus sequence: HDDTGTTKTTKTHHD

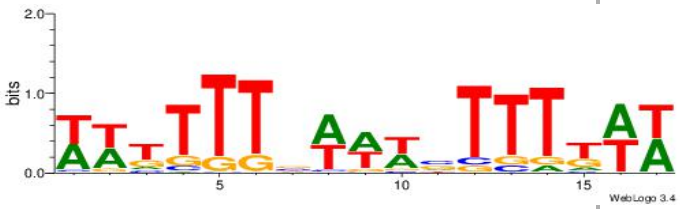


Dataset #: 1 Motif ID: 139 Motif name: C139

Original motif
Consensus sequence: WWMAAABWWWVAAAAWW



Reverse complement motif
Consensus sequence: WWTTTTVWWWBTTTYWW



Best Matches for Motif ID 139 (Highest to Lowest)

Motif ID:	UP00034
Motif name:	Sox7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif

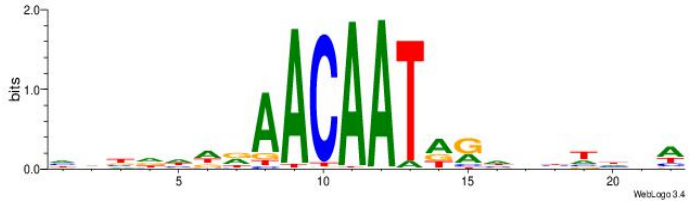
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	17
Similarity score:	0.0481917

Alignment:

```
HHBDHDDAACAATDRHHHHHBW
---WWMAAABWWWVAAAAWW--
```

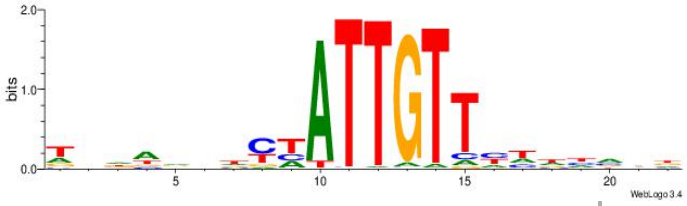
Original motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW



Reverse complement motif

Consensus sequence: WBHHHHHMDATTGTTHDHDVHH



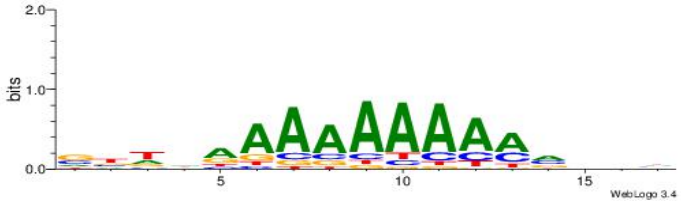
Motif ID:	UP00077
Motif name:	Srf_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	17
Similarity score:	0.0496844

Alignment:

VBDDAAAAAAAAMVBHH
WWMAAABWWWVAAAAWW

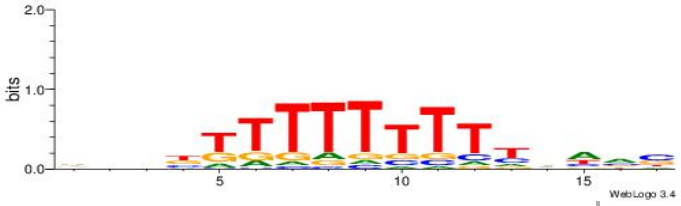
Original motif

Consensus sequence: VBDDAAAAAAAAMVBHH



Reverse complement motif

Consensus sequence: HHVBYTTTTTTTTDDVV



Motif ID:	UP00255
Motif name:	Dbx1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	17
Similarity score:	0.0509582

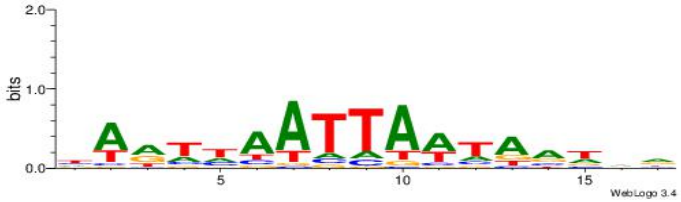
Alignment:
HARTHAATTAWTAVDHD
WWMAAABWWWVAAAAWW

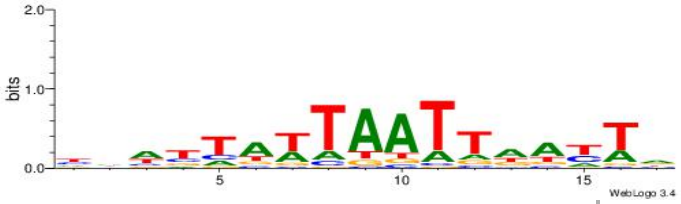
Original motif

Consensus sequence: HARTHAATTAWTAVDHD

Reverse complement motif

Consensus sequence: DHDBTAWTAATTHAKTH





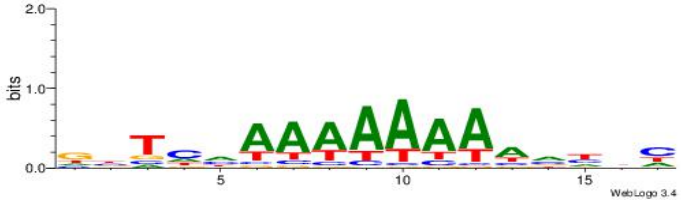
Motif ID:	UP00090
Motif name:	Elf3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	17
Similarity score:	0.0532816

Alignment:

```
DBTHHAAAAAAAAVHDH
WWMAAABWWWVAAAAWW
```

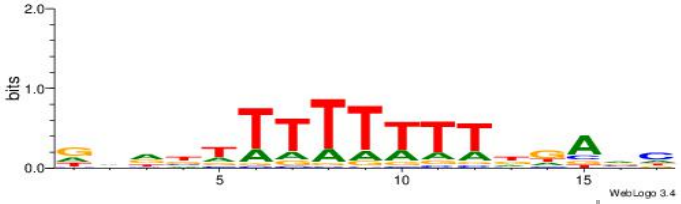
Original motif

Consensus sequence: DBTHHAAAAAAAAVHDH



Reverse complement motif

Consensus sequence: DDHBTTTTTTTTHDAVH



Motif ID:	UP00037

Motif name:	Zfp105_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:	0.05356

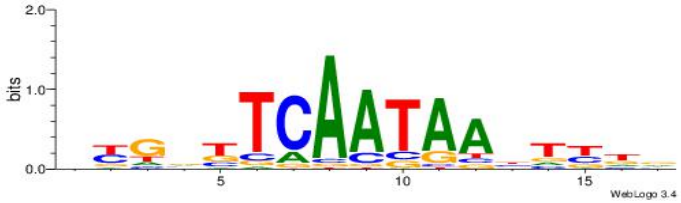
Alignment:

HDMAVTTATTGARVCMH

WWMAAABWWWVAAAAWW

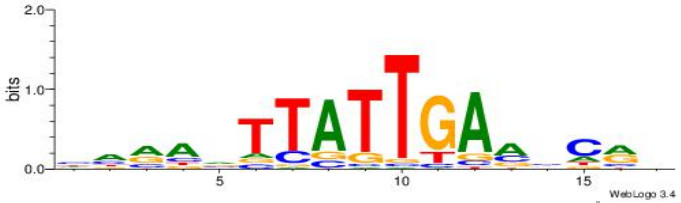
Original motif

Consensus sequence: DYGVKTCAATAABTYDD



Reverse complement motif

Consensus sequence: HDMAVTTATTGARVCMH



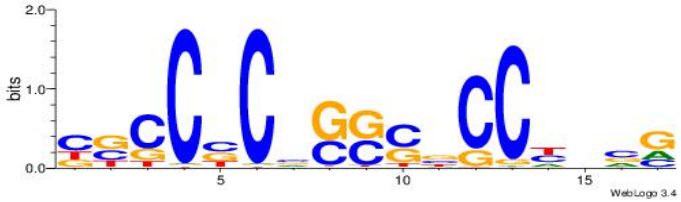
Dataset #: 1 Motif ID: 140 Motif name: C140

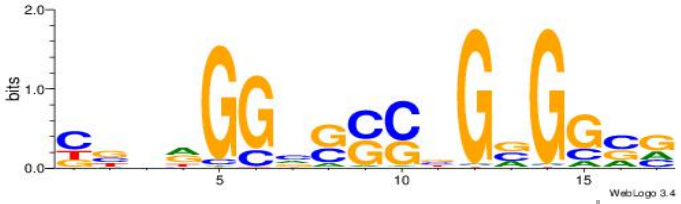
Original motif

Consensus sequence: BSCCBCVSSSBCCYHVG

Reverse complement motif

Consensus sequence: CVDMGGBSSSVGBGGSB





Best Matches for Motif ID 140 (Highest to Lowest)

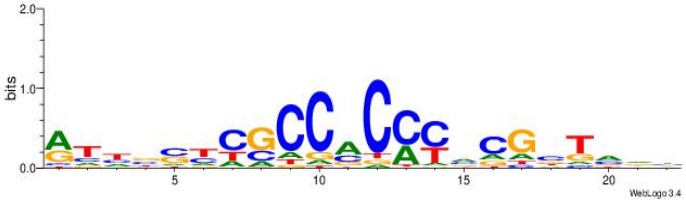
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	17
Similarity score:	0.0510096

Alignment:

```
RTHBSYCGCCMCMYVCGBTVDH
BSCCBCVSSSBCCYHVG-----
```

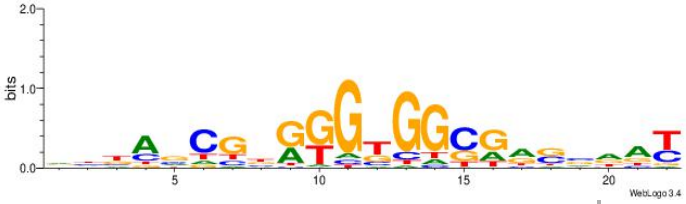
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



Motif ID:	UP00400

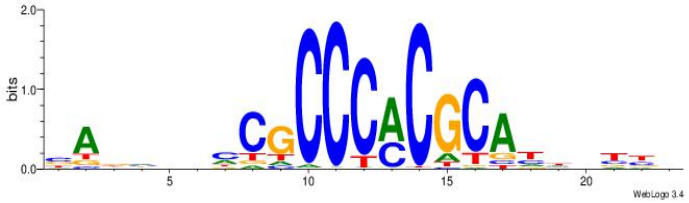
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	17
Similarity score:	0.0520625

Alignment:

```
VVVDHHTGCGYGGGCGDHVHHTB
--CVDMGGBSSSVGBGGSB----
```

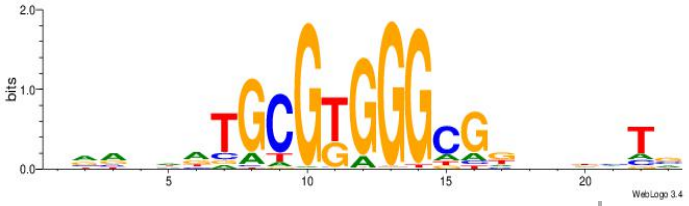
Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif

Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB

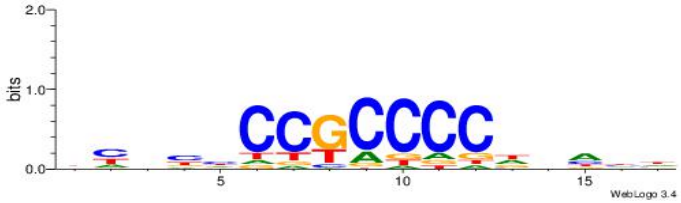


Motif ID:	UP00033
Motif name:	Zfp410_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	17

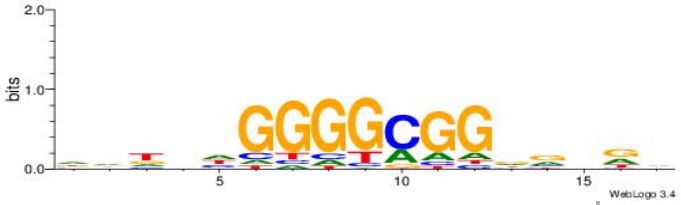
Similarity score: 0.0523971

Alignment:
BHHBHCCGCCCCDHHHH
BSCCBCVSSSBCCYHVG

Original motif
Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif
Consensus sequence: HHHHDGGGGCGGDBHDV

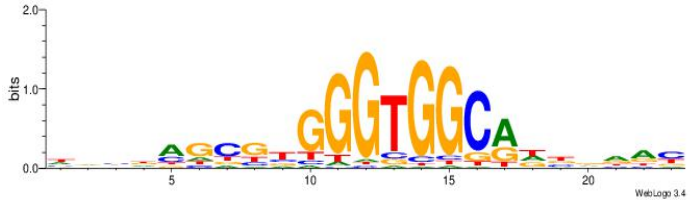


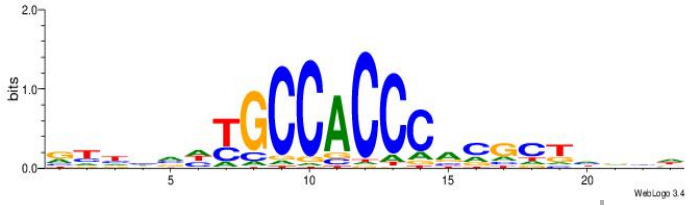
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	17
Similarity score:	0.0544357

Alignment:
BDDHVDKGCCACCCVCGCTDBVH
------BSCCBCVSSSBCCYHVG

Original motif
Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB

Reverse complement motif
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH





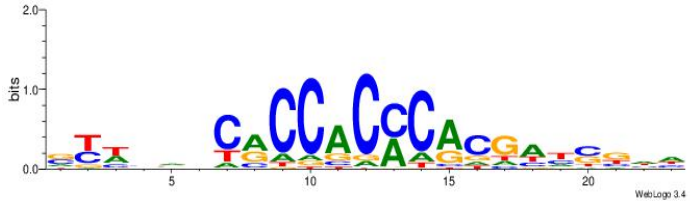
Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	17
Similarity score:	0.0585258

Alignment:

```
HHBSHTCGTGRGTGGKGDBVWMV
--CVDMGGBSSSVGBGGSB----
```

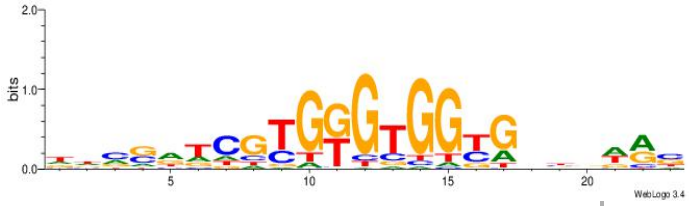
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

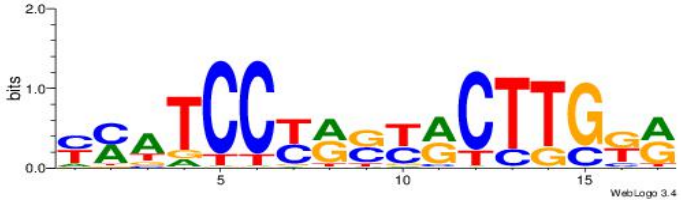
Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



Dataset #: 1 **Motif ID: 141** **Motif name: C141**

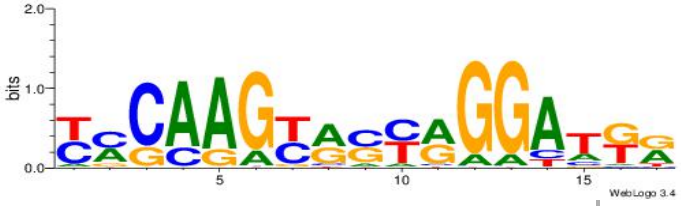
Original motif

Consensus sequence: YMATCCYRSYRCTTGKR



Reverse complement motif

Consensus sequence: KYCAAGKMSKMGGATRK



Best Matches for Motif ID 141 (Highest to Lowest)

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:	2
Number of overlap:	17
Similarity score:	0.048695

Alignment:

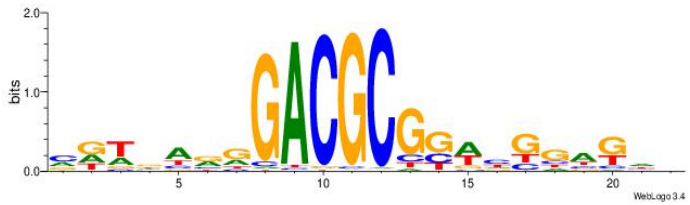
```
VDWDARRGACGCGGWHGGAKHV
-KYCAAGKMSKMGGATRK----
```

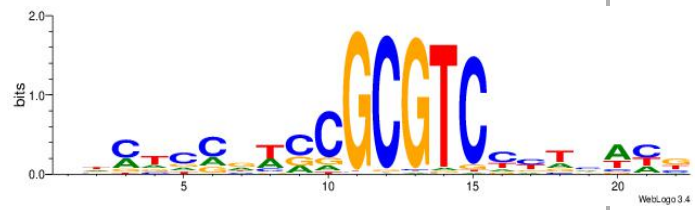
Original motif

Consensus sequence: VDWDARRGACGCGGWHGGAKHV

Reverse complement motif

Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV





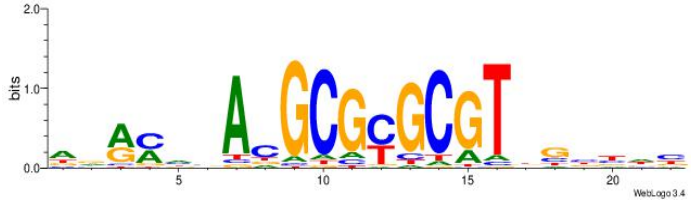
Motif ID:	UP00526
Motif name:	Foxn1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	17
Similarity score:	0.0533376

Alignment:

```
BDVBCDACGCKCGCGTBHRKHD
---KYCAAGKMSKMGGATRK--
```

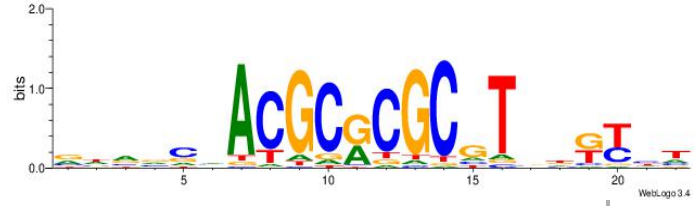
Original motif

Consensus sequence: DDRMHBACGCGYGCGTDGBBDB



Reverse complement motif

Consensus sequence: BDVBCDACGCKCGCGTBHRKHD



Motif ID:	UP00033

Motif name:	Zfp410_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	17
Similarity score:	0.0540672

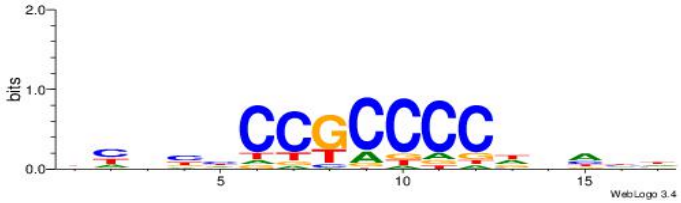
Alignment:

BHHBHCCGCCCCDHHHH

YMATCCYRSYRCTTGKR

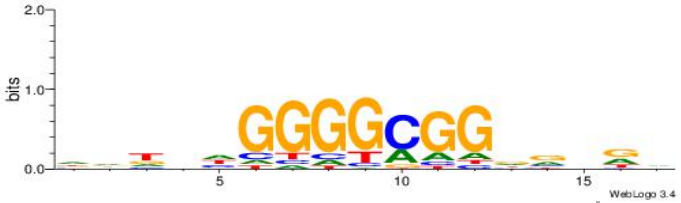
Original motif

Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif

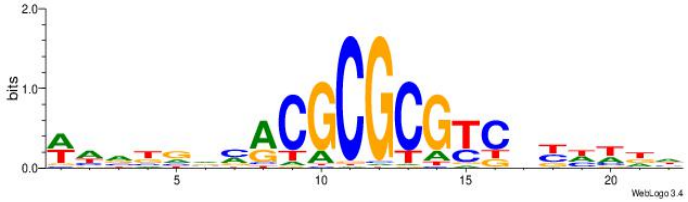
Consensus sequence: HHHHDGGGGCGGDBHDV



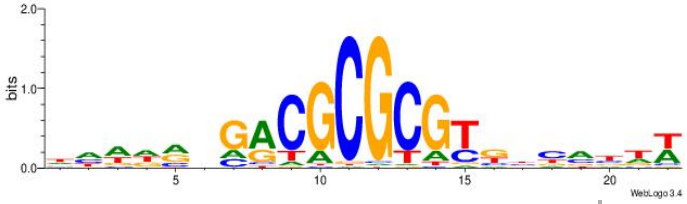
Motif ID:	UP00526
Motif name:	Foxn1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	17
Similarity score:	0.0558883

Alignment:
HDWHMHGACGCGCGTRBVVBHW
KYCAAGKMSKMGGATRK-----

Original motif
Consensus sequence: WHVBVVMACGCGCGTCDYHWDH



Reverse complement motif
Consensus sequence: HDWHMHGACGCGCGTRBVVBHW

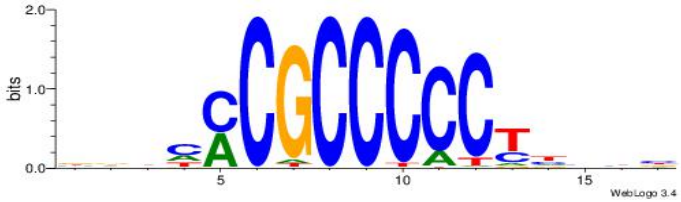


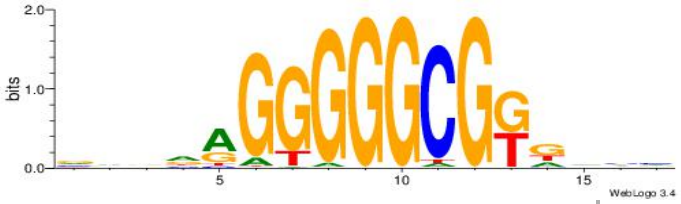
Motif ID:	UP00002
Motif name:	Sp4_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	17
Similarity score:	0.0562075

Alignment:
BVVHAGGGGGCGRDHHB
KYCAAGKMSKMGGATRK

Original motif
Consensus sequence: BDHHMCGCCCCCTHVBB

Reverse complement motif
Consensus sequence: BVVHAGGGGGCGRDHHB





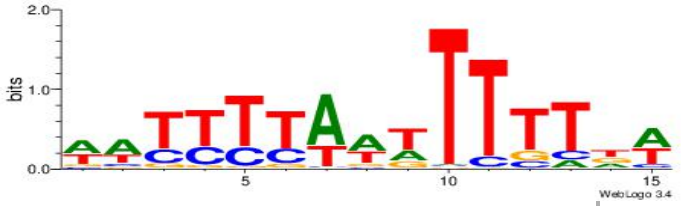
Dataset #: 1 Motif ID: 142 Motif name: C142

Original motif

Consensus sequence: WHAAAAAWTAAAAWW

Reverse complement motif

Consensus sequence: WWTTTTAWTTTTTHW



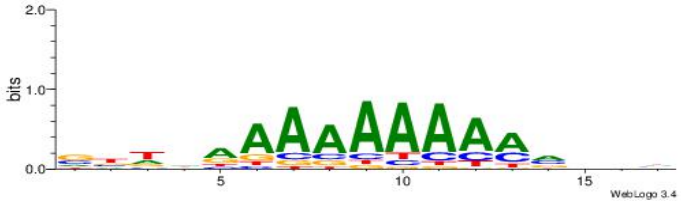
Best Matches for Motif ID 142 (Highest to Lowest)

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:	Forward
Position number:	1
Number of overlap:	15
Similarity score:	0.0209943

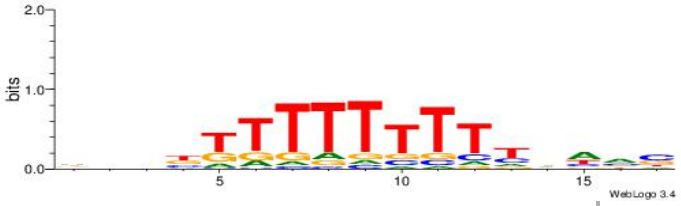
Alignment:

HHVBYTTTTTTTTDDVV
WWTTTTAWTTTTTHW--

Original motif
Consensus sequence: VBDDAAAAAAAAMVBHH



Reverse complement motif
Consensus sequence: HHVBYTTTTTTTTDDVV

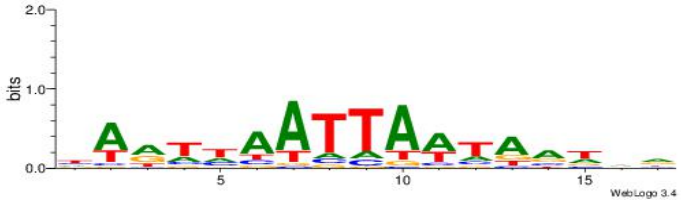


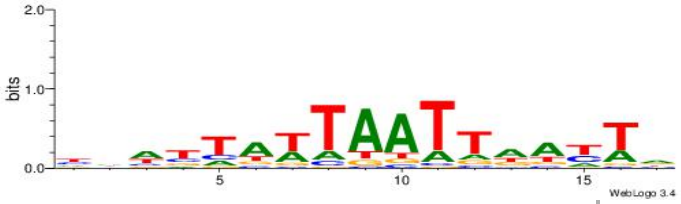
Motif ID:	UP00255
Motif name:	Dbx1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	15
Similarity score:	0.0296488

Alignment:
HARTHAATTAWTAVDHD
WHAAAAAWTAAAAWW--

Original motif
Consensus sequence: HARTHAATTAWTAVDHD

Reverse complement motif
Consensus sequence: DHDBTAWTAATTHAKTH



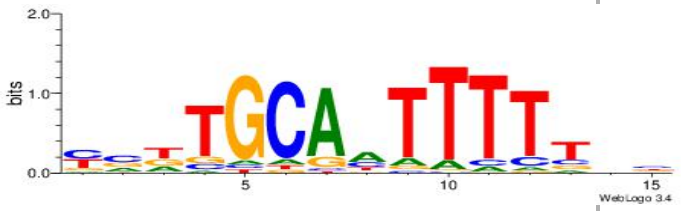


Motif ID:	UP00044
Motif name:	Mafk_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	15
Similarity score:	0.0298134

Alignment:
MBHTGCADTTTTTHV
WWTTTTAWTTTTTHW

Original motif
Consensus sequence: VHAAAAADTGCAHBR

Reverse complement motif
Consensus sequence: MBHTGCADTTTTTHV



Motif ID:	UP00090

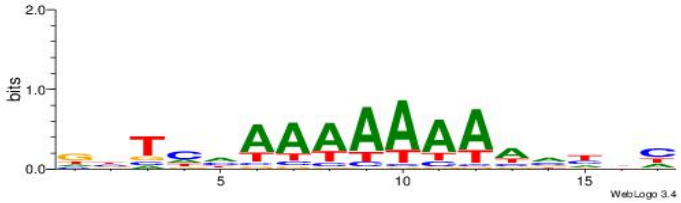
Motif name:	Elf3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	15
Similarity score:	0.02982

Alignment:

```
DDHBTTTTTTTTHDAVH
-WWTTTTAWTTTTTHW-
```

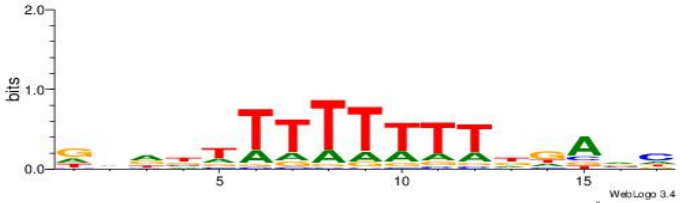
Original motif

Consensus sequence: DBTHHAAAAAAAAVHDH



Reverse complement motif

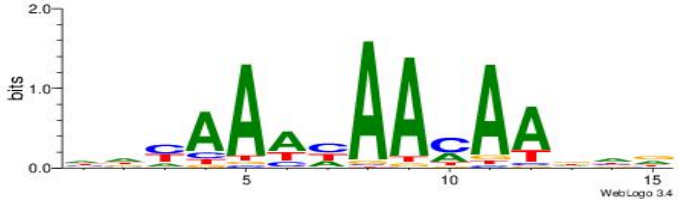
Consensus sequence: DDHBTTTTTTTTHDAVH



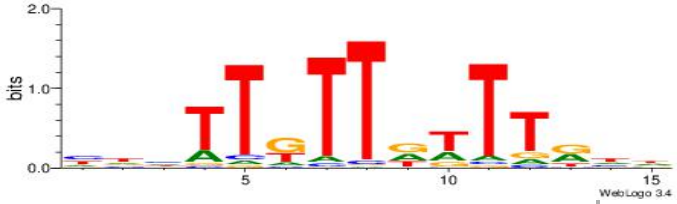
Motif ID:	UP00037
Motif name:	Zfp105_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	15
Similarity score:	0.0336901

Alignment:
HHHTTRTTDTTTKDH
WWTTTTAWTTTTTHW

Original motif
Consensus sequence: HDYAAAHAAMAADHD

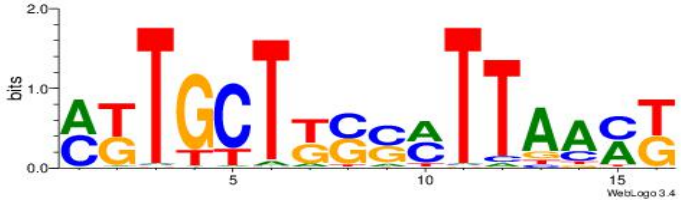


Reverse complement motif
Consensus sequence: HHHTTRTTDTTTKDH

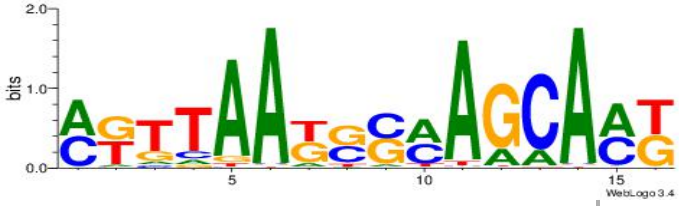


Dataset #: 1 Motif ID: 143 Motif name: C143

Original motif
Consensus sequence: MKTGCTKSSMTTAAMK



Reverse complement motif
Consensus sequence: RRTTAAYSSRAGCARY



Best Matches for Motif ID 143 (Highest to Lowest)

Motif ID:	UP00032
Motif name:	Gata3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif

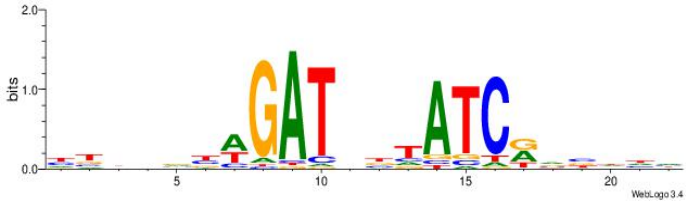
Direction:	Forward
Position number:	4
Number of overlap:	16
Similarity score:	0.043815

Alignment:

```
HBHDVBWGATHBTATCRVBHHH
---RRTTAAYSSRAGCARY---
```

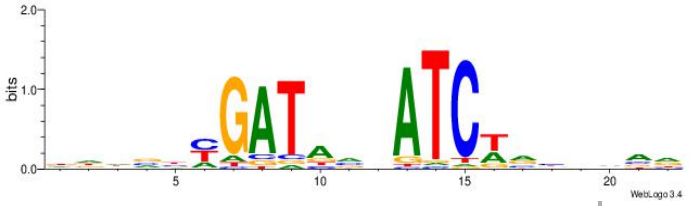
Original motif

Consensus sequence: HBHDVBWGATHBTATCRVBHHH



Reverse complement motif

Consensus sequence: HHHBBMGATAVHATCWVVDHVH



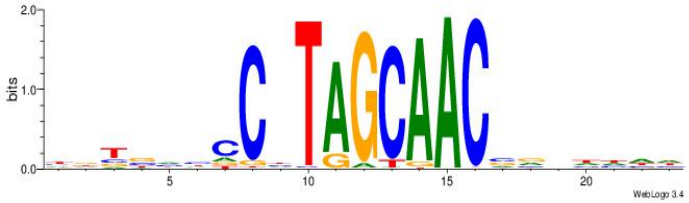
Motif ID:	UP00098
Motif name:	Rfx3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	8
Number of overlap:	16
Similarity score:	0.0460848

Alignment:

HDTBHHCCHTAGCAACVVDHHHH
RRTTAAYSSRAGCARY-------

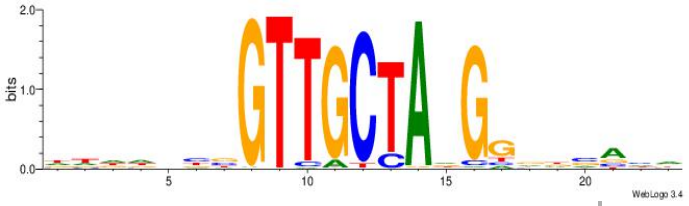
Original motif

Consensus sequence: HDTBHHCCHTAGCAACVVDHHHH



Reverse complement motif

Consensus sequence: HHHHDVVGTTGCTAHGGDHBAHH



Motif ID:	UP00190
Motif name:	Nkx2-3
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:	16
Similarity score:	0.0485356

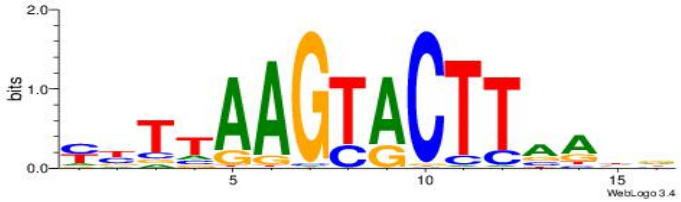
Alignment:
HHTTAAGTACTTAAMK
MKTGCTKSSMTTAAMK

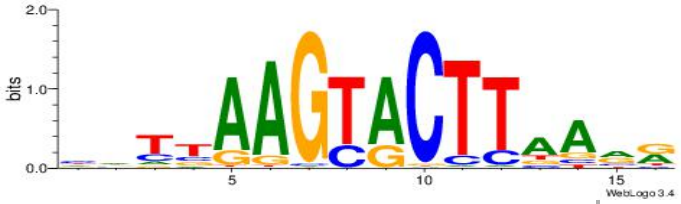
Original motif

Consensus sequence: YYTTAAGTACTTAAHD

Reverse complement motif

Consensus sequence: HHTTAAGTACTTAAMK





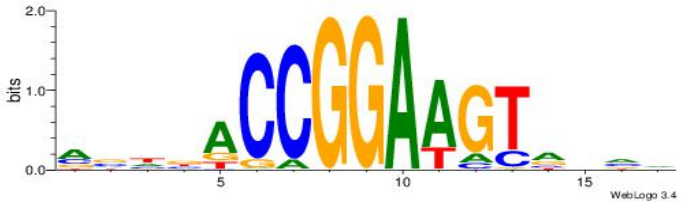
Motif ID:	UP00421
Motif name:	Etv1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	16
Similarity score:	0.0513932

Alignment:

```
MVHBACCGGAAGTVDVH
RRTTAAYSSRAGCARY-
```

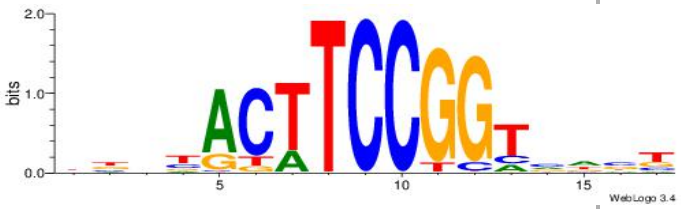
Original motif

Consensus sequence: MVHBACCGGAAGTVDVH



Reverse complement motif

Consensus sequence: HBDBACTTCCGGTBHVY



Motif ID:	UP00410

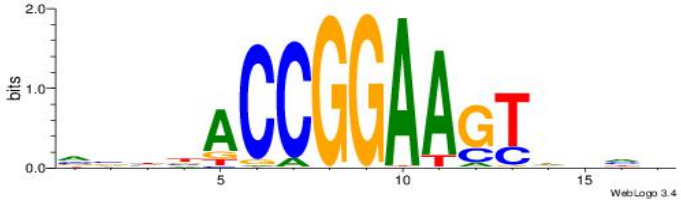
Motif name:	Elk1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	16
Similarity score:	0.051952

Alignment:

```
DHBDACTTCCGGTVHVB
RRTTAAYSSRAGCARY-
```

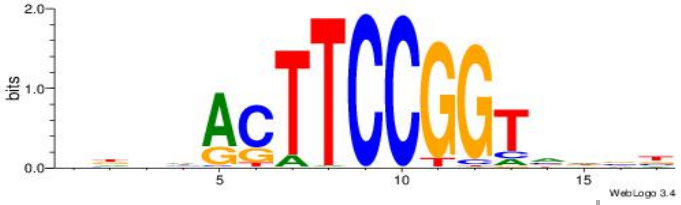
Original motif

Consensus sequence: VVHBACCGGAAGTDBHD



Reverse complement motif

Consensus sequence: DHBDACTTCCGGTVHVB



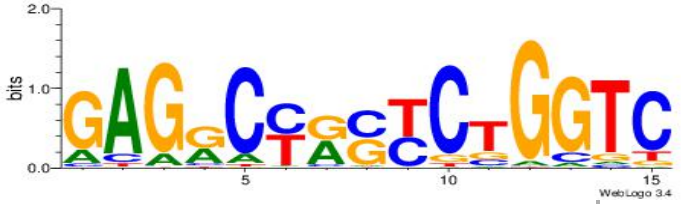
Dataset #: 1 Motif ID: 144 Motif name: C144

Original motif

Consensus sequence: GACCAGRSYRGYCTC

Reverse complement motif

Consensus sequence: GAGKCKKSKCTGGTC



Best Matches for Motif ID 144 (Highest to Lowest)

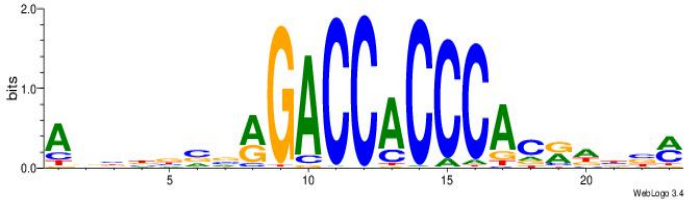
Motif ID:	UP00540
Motif name:	Gli3_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	9
Number of overlap:	15
Similarity score:	0.0365285

Alignment:

```
YBVDMGTGGGTGGTCKVVBVBBT
GAGKCKKSKCTGGTC--------
```

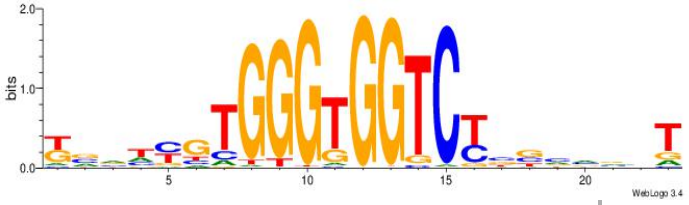
Original motif

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:	Reverse Complement

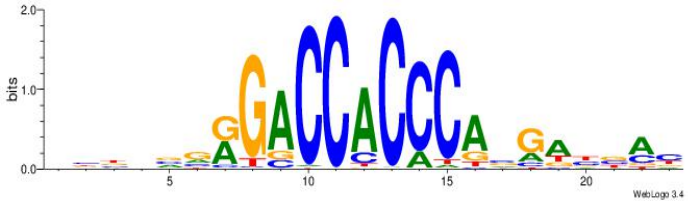
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	15
Similarity score:	0.0367839

Alignment:

```
BTBVTCVTGGGTGGTCMVVDVBB
-GAGKCKKSKCTGGTC-------
```

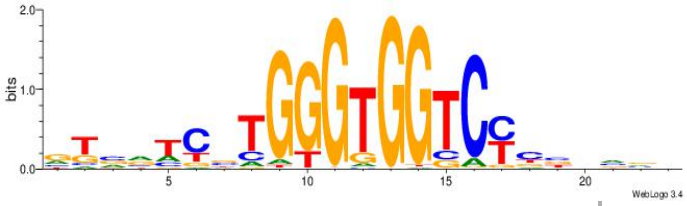
Original motif

Consensus sequence: BBBDVVRGACCACCCAVGABBAB



Reverse complement motif

Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB



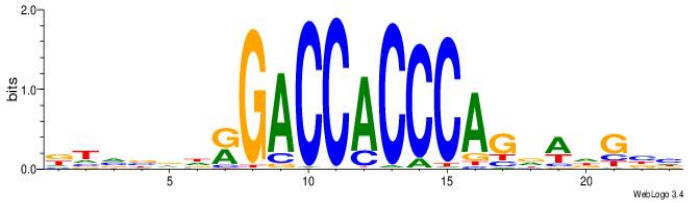
Motif ID:	UP00539
Motif name:	Gli2_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	15
Similarity score:	0.0372292

Alignment:

DBCDWHCTGGGTGGTCMDHBBAH
-GAGKCKKSKCTGGTC-------

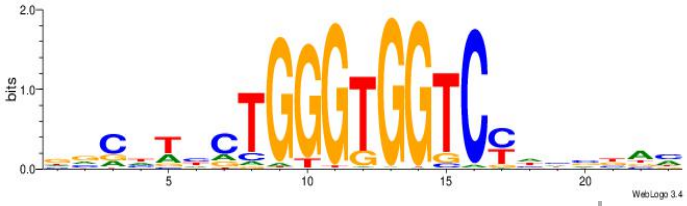
Original motif

Consensus sequence: DTVBDDRGACCACCCAGDWDGBH



Reverse complement motif

Consensus sequence: DBCDWHCTGGGTGGTCMDHBBAH



Motif ID:	UP00539
Motif name:	Gli2_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	15
Similarity score:	0.037305

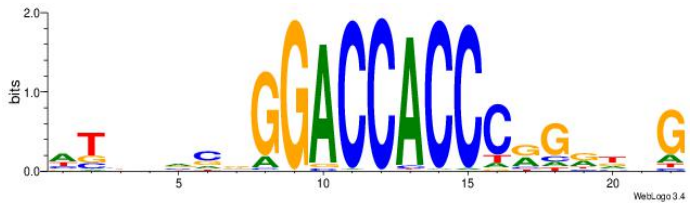
Alignment:
CBDMCMGGGTGGTCCHVBVBAH
-GACCAGRSYRGYCTC------

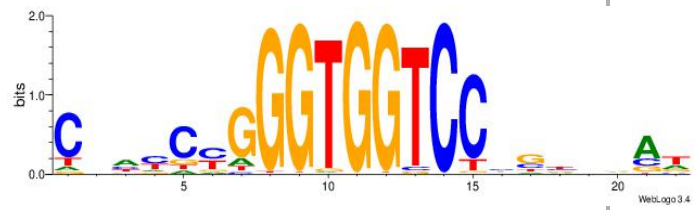
Original motif

Consensus sequence: HTBVVVDGGACCACCCRGRDBG

Reverse complement motif

Consensus sequence: CBDMCMGGGTGGTCCHVBVBAH





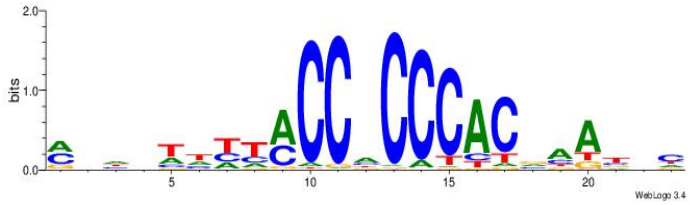
Motif ID:	UP00538
Motif name:	Gli1_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	15
Similarity score:	0.0395722

Alignment:

```
DVVTTVGTGGGHGGYAMHWHHHY
-GAGKCKKSKCTGGTC-------
```

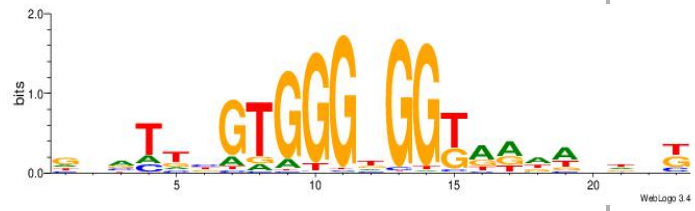
Original motif

Consensus sequence: MHHHWHYTMCCHCCCACVAABVH



Reverse complement motif

Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY



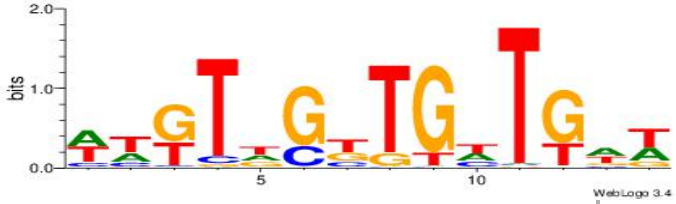
Dataset #: 1 Motif ID: 145 Motif name: C145

Original motif

Consensus sequence: WWCADCAMCHAMWW

Reverse complement motif

Consensus sequence: WWRTHGYTGDTGWW



Best Matches for Motif ID 145 (Highest to Lowest)

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:	2
Number of overlap:	14
Similarity score:	0.0335902

Alignment:

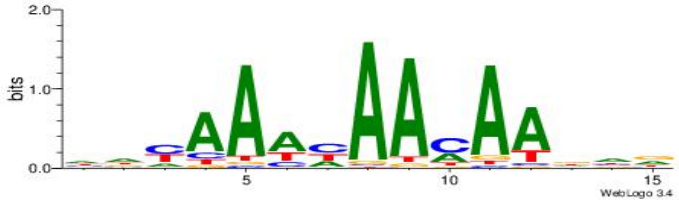
```
HDYAAAHAAMAADHD
-WWCADCAMCHAMWW
```

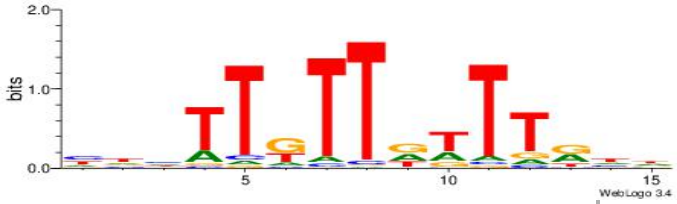
Original motif

Consensus sequence: HDYAAAHAAMAADHD

Reverse complement motif

Consensus sequence: HHHTTRTTDTTTKDH





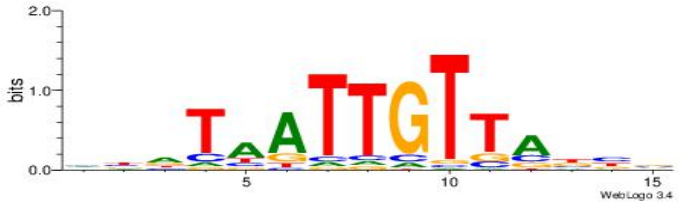
Motif ID:	UP00069
Motif name:	Sox1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0379211

Alignment:

```
HBDTAATTGTTABBV
WWRTHGYTGDTGWW-
```

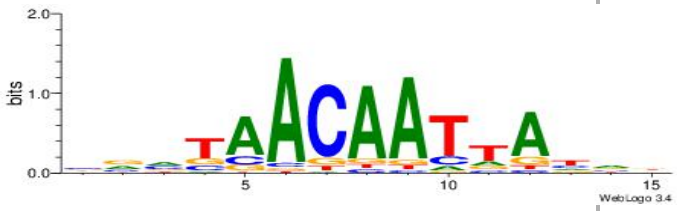
Original motif

Consensus sequence: HBDTAATTGTTABBV



Reverse complement motif

Consensus sequence: VBVTAACAATTADVD



Motif ID:	UP00185

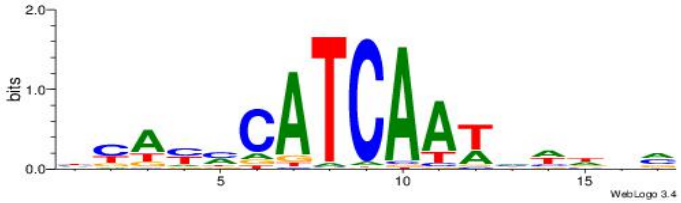
Motif name:	Pbx1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	14
Similarity score:	0.0393885

Alignment:

```
HYAYMCATCAAWHWDVV
---WWCADCAMCHAMWW
```

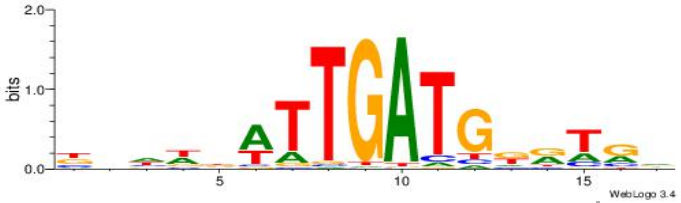
Original motif

Consensus sequence: HYAYMCATCAAWHWDVV



Reverse complement motif

Consensus sequence: BVDWHWTTGATGRKTKH

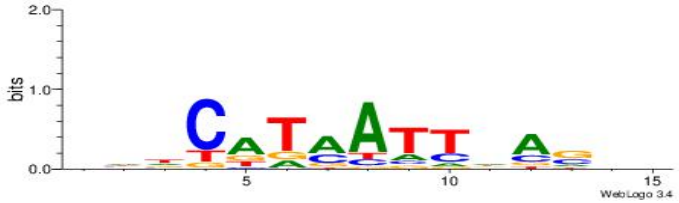


Motif ID:	UP00091
Motif name:	Sox5_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	14

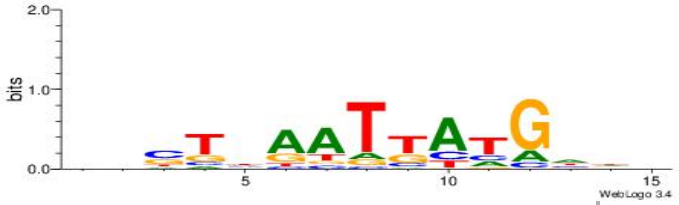
Similarity score: 0.0396706

Alignment:
DHDCATMATTDASDD
-WWCADCAMCHAMWW

Original motif
Consensus sequence: DHDCATMATTDASDD



Reverse complement motif
Consensus sequence: DHSTDAATYATGDHD

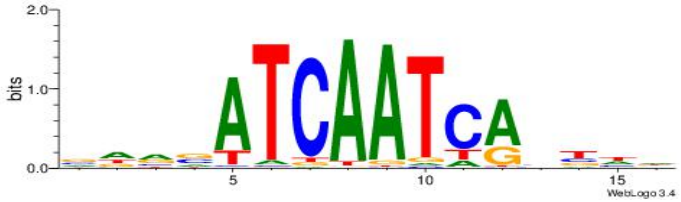


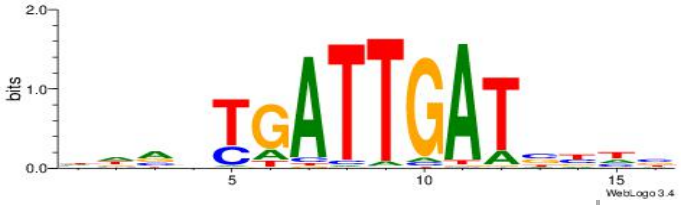
Motif ID: UP00067
Motif name: Lef1_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 2
Number of overlap: 14
Similarity score: 0.0406825

Alignment:
VDVVATCAATCAHBHD
-WWCADCAMCHAMWW-

Original motif
Consensus sequence: VDVVATCAATCAHBHD

Reverse complement motif
Consensus sequence: DHVDTGATTGATVBDV

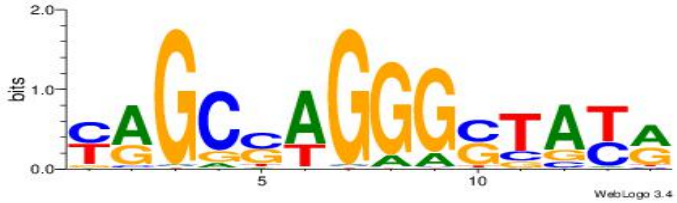




Dataset #: 1 **Motif ID: 146** **Motif name: C146**

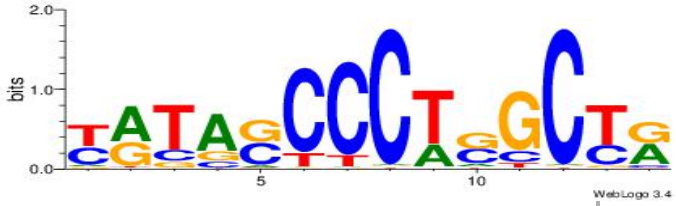
Original motif

Consensus sequence: YRGCSAGGGSTAYR



Reverse complement motif

Consensus sequence: KMTASCCCTSGCKK



Best Matches for Motif ID 146 (Highest to Lowest)

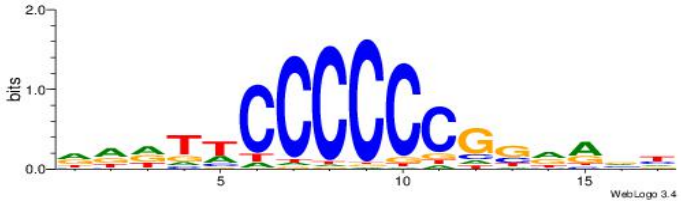
Motif ID:	UP00022
Motif name:	Zfp740_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	14
Similarity score:	0.0330877

Alignment:

HVKDCCGGGGGGWADDD
--YRGCSAGGGSTAYR-

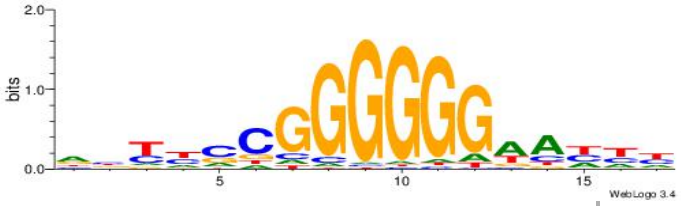
Original motif

Consensus sequence: DDDTWCCCCCCGGDRVH



Reverse complement motif

Consensus sequence: HVKDCCGGGGGGWADDD



Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	14
Similarity score:	0.0345026

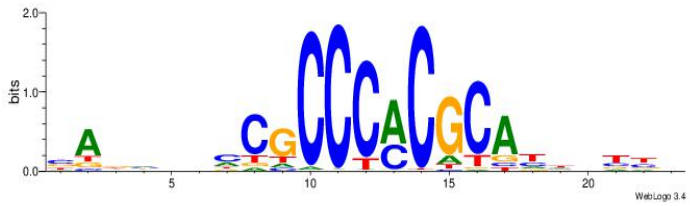
Alignment:
VVVDHHTGCGYGGGCGDHVHHTB
-----YRGCSAGGGSTAYR----

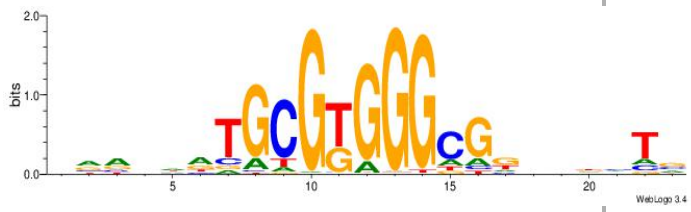
Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV

Reverse complement motif

Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB





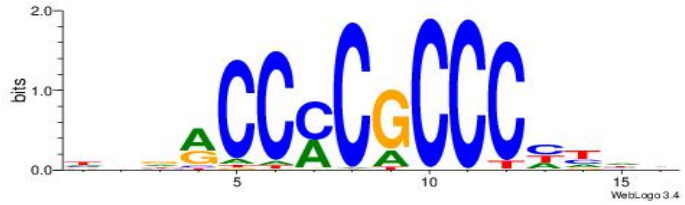
Motif ID:	UP00093
Motif name:	Klf7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	14
Similarity score:	0.0369871

Alignment:

```
DHHDGGGCGRGGKHBH
--YRGCSAGGGSTAYR
```

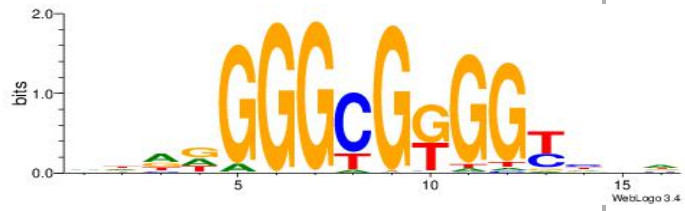
Original motif

Consensus sequence: HBDRCCMCGCCCHHHD



Reverse complement motif

Consensus sequence: DHHDGGGCGRGGKHBH



Motif ID:	UP00539

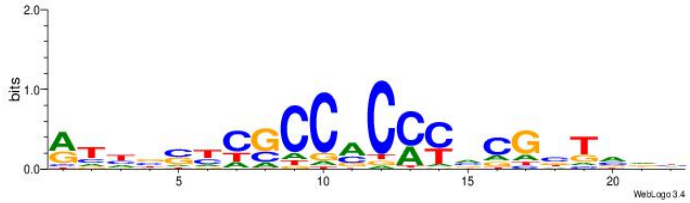
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	14
Similarity score:	0.0374088

Alignment:

```
HDBABCGBKRGYGGCGMSBHAK
--YRGCSAGGGSTAYR------
```

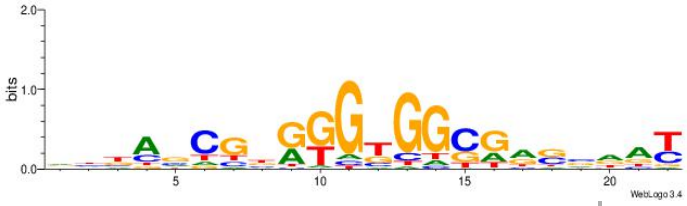
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

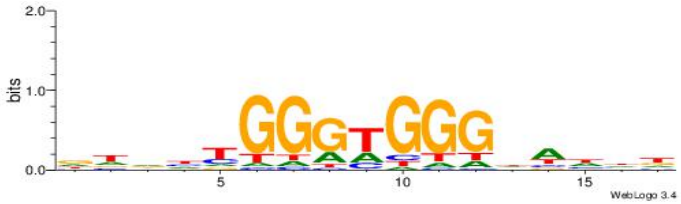
Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



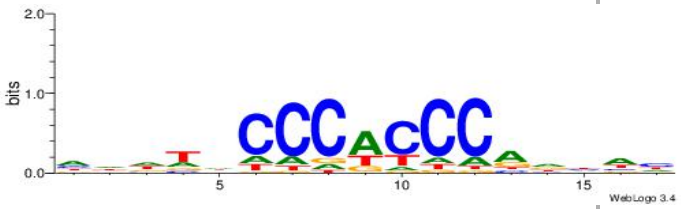
Motif ID:	UP00096
Motif name:	Sox13_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0400162

Alignment:
DDDHTGGGTGGGHAHHD
---YRGCSAGGGSTAYR

Original motif
Consensus sequence: DDDHTGGGTGGGHAHHD

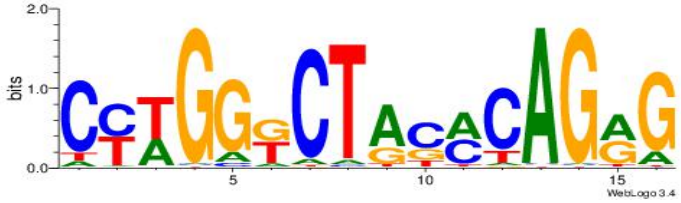


Reverse complement motif
Consensus sequence: DHHTHCCCACCCAHDDH

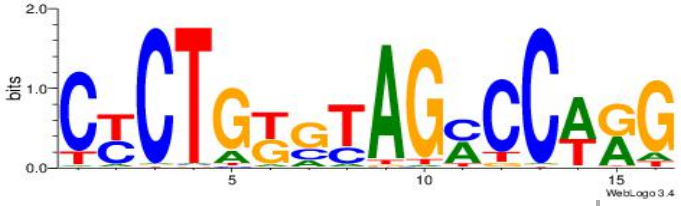


Dataset #: 1 Motif ID: 147 Motif name: C147

Original motif
Consensus sequence: CYWGGKCTACMCAGRG



Reverse complement motif
Consensus sequence: CKCTGYGTAGYCCWKG



Best Matches for Motif ID 147 (Highest to Lowest)

Motif ID:	UP00539
Motif name:	Gli2_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif

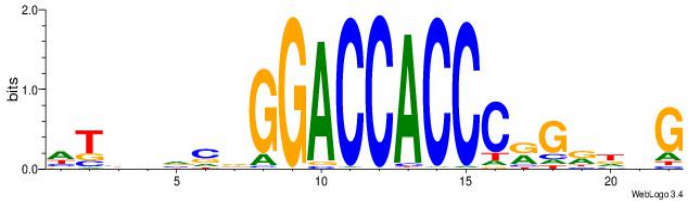
Direction:	Backward
Position number:	3
Number of overlap:	16
Similarity score:	0.0270313

Alignment:

```
HTBVVVDGGACCACCCRGRDBG
----CYWGGKCTACMCAGRG--
```

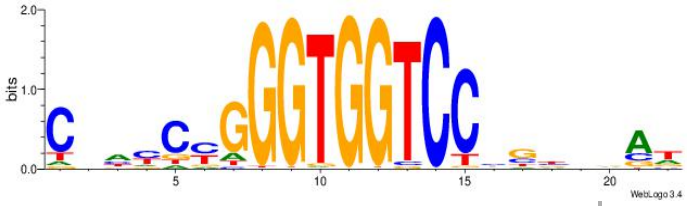
Original motif

Consensus sequence: HTBVVVDGGACCACCCRGRDBG



Reverse complement motif

Consensus sequence: CBDMCMGGGTGGTCCHVBVBAH



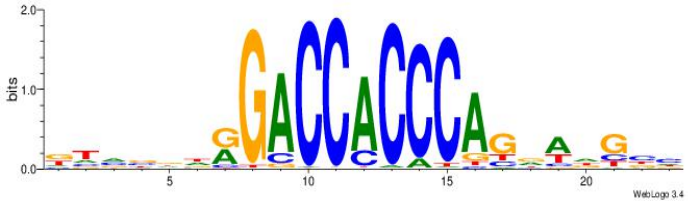
Motif ID:	UP00539
Motif name:	Gli2_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	16
Similarity score:	0.029263

Alignment:

DTVBDDRGACCACCCAGDWDGBH
---CYWGGKCTACMCAGRG----

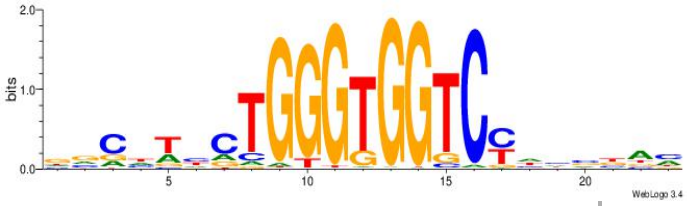
Original motif

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:	Backward
Position number:	5
Number of overlap:	16
Similarity score:	0.0296975

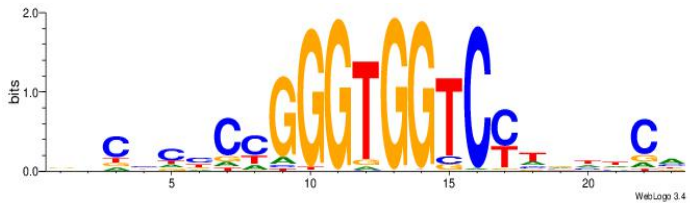
Alignment:
HGDHVHKGACCACCCGGBGBGDB
---CYWGGKCTACMCAGRG----

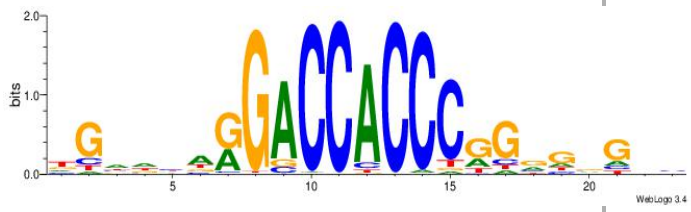
Original motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH

Reverse complement motif

Consensus sequence: HGDHVHKGACCACCCGGBGBGDB





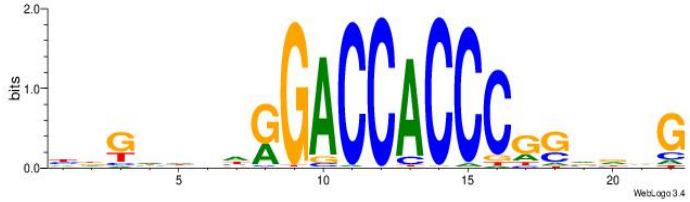
Motif ID:	UP00540
Motif name:	Gli3_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	16
Similarity score:	0.0322159

Alignment:

```
HDGHHBHRGACCACCCGSVDVG
----CYWGGKCTACMCAGRG--
```

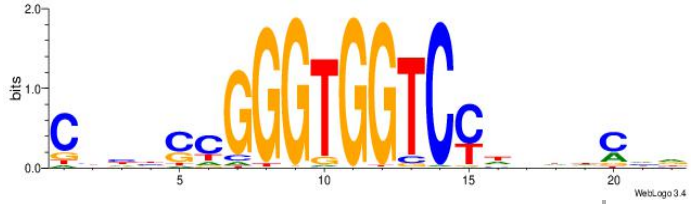
Original motif

Consensus sequence: HDGHHBHRGACCACCCGSVDVG



Reverse complement motif

Consensus sequence: CVHBSCGGGTGGTCMHVHHCDH



Motif ID:	UP00538

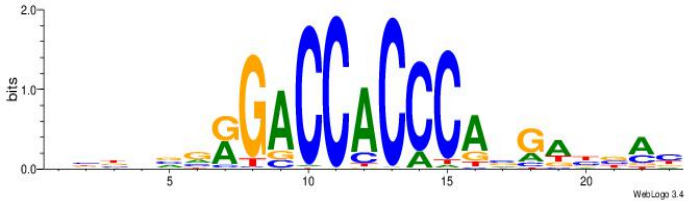
Motif name:	Gli1_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	16
Similarity score:	0.0386994

Alignment:

```
BBBDVVRGACCACCCAVGABBAB
---CYWGGKCTACMCAGRG----
```

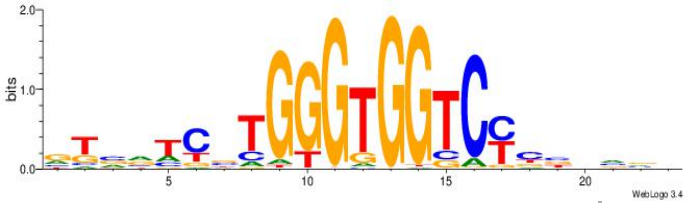
Original motif

Consensus sequence: BBBDVVRGACCACCCAVGABBAB



Reverse complement motif

Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB



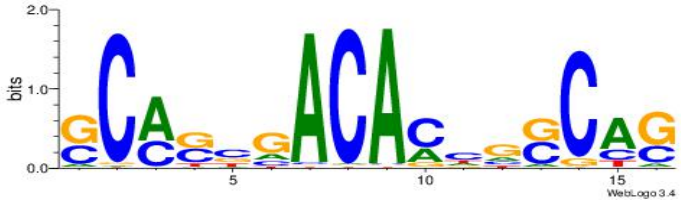
Dataset #: 1 Motif ID: 148 Motif name: C148

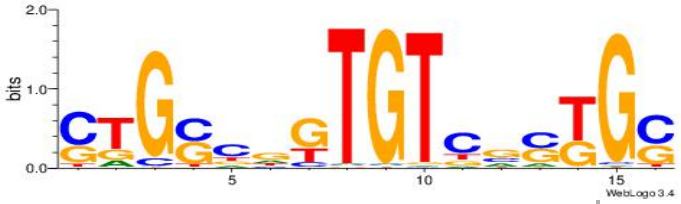
Original motif

Consensus sequence: SCMSBGACACHGSCAS

Reverse complement motif

Consensus sequence: STGSCDGTGTCBSYGS





Best Matches for Motif ID 148 (Highest to Lowest)

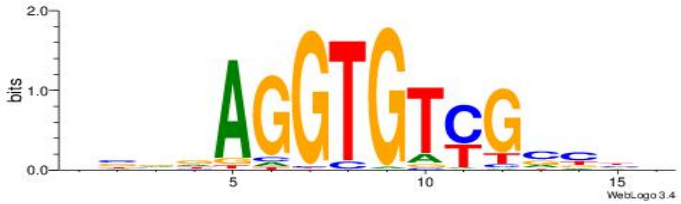
Motif ID:	UP00068
Motif name:	Eomes_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	16
Similarity score:	0.0245227

Alignment:

```
VBVDAGGTGTYGVBBV
STGSCDGTGTCBSYGS
```

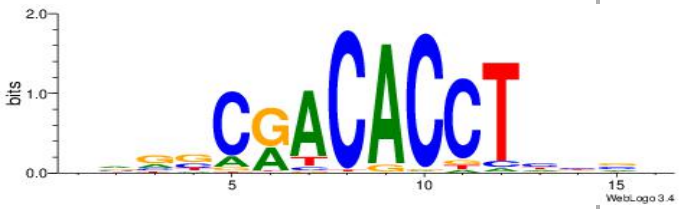
Original motif

Consensus sequence: VBVDAGGTGTYGVBBV



Reverse complement motif

Consensus sequence: VVBVCKACACCTHVBV



Motif ID:	UP00100
Motif name:	Gata6_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:	16
Similarity score:	0.0325938

Alignment:

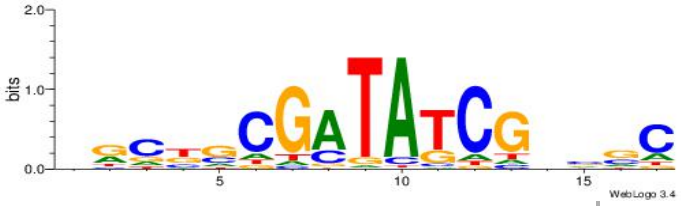
```
HKCBSCGATATCGVBBC
-STGSCDGTGTCBSYGS
```

Original motif

Consensus sequence: GBBVCGATATCGSVGYD

Reverse complement motif

Consensus sequence: HKCBSCGATATCGVBBC

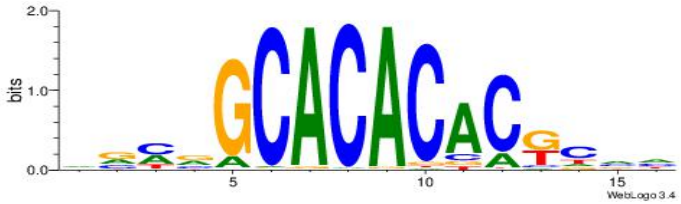


Motif ID:	UP00042
Motif name:	Gm397_second
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	16

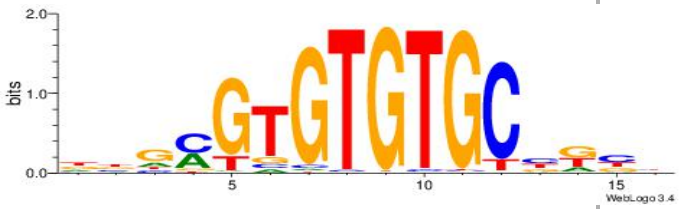
Similarity score: 0.0369917

Alignment:
DVMVGCACACACKCVH
SCMSBGACACHGSCAS

Original motif
Consensus sequence: DVMVGCACACACKCVH



Reverse complement motif
Consensus sequence: HBGYGTGTGTGCVRVD

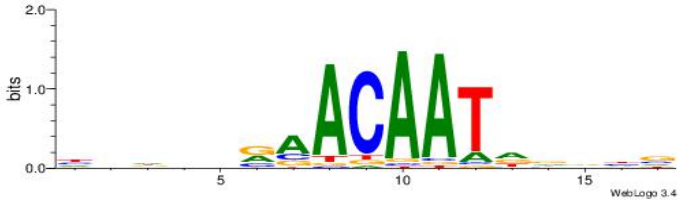


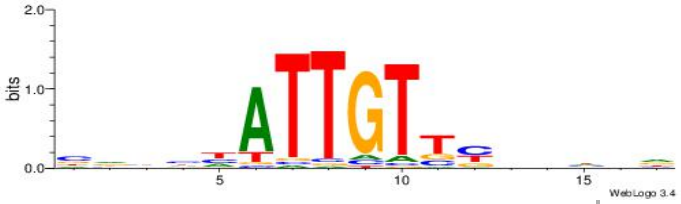
Motif ID:	UP00016
Motif name:	Sry_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	16
Similarity score:	0.0372098

Alignment:
HHDHDRAACAATDDVHV
-SCMSBGACACHGSCAS

Original motif
Consensus sequence: HHDHDRAACAATDDVHV

Reverse complement motif
Consensus sequence: VHVHDATTGTTMHDDDH





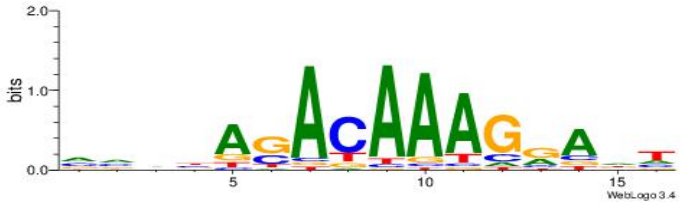
Motif ID:	UP00101
Motif name:	Sox12_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	16
Similarity score:	0.037346

Alignment:

```
VVDBASACAAAGRADH
SCMSBGACACHGSCAS
```

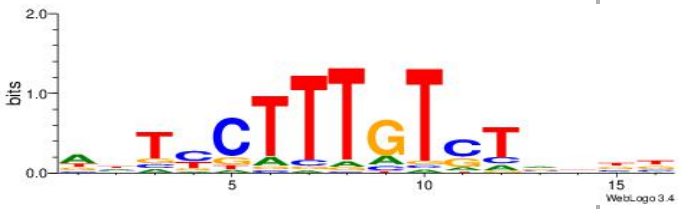
Original motif

Consensus sequence: VVDBASACAAAGRADH



Reverse complement motif

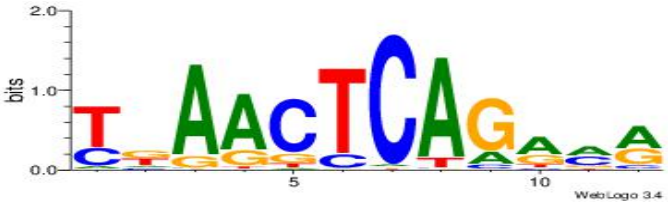
Consensus sequence: HDTMCTTTGTSTVDBB



Dataset #: 1 Motif ID: 149 Motif name: C149

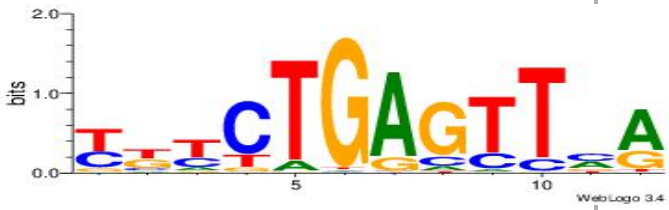
Original motif

Consensus sequence: TKAACTCAGRMR



Reverse complement motif

Consensus sequence: KYKCTGAGTTYA



Best Matches for Motif ID 149 (Highest to Lowest)

Motif ID:	UP00148
Motif name:	Hdx
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:	0.0197225

Alignment:

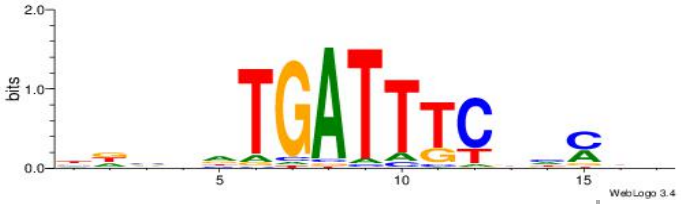
```
BDBDHTGATTTCDHYDD
-KYKCTGAGTTYA----
```

Original motif

Consensus sequence: DDKDHGAAATCAHHBHV

Reverse complement motif

Consensus sequence: BDBDHTGATTTCDHYDD



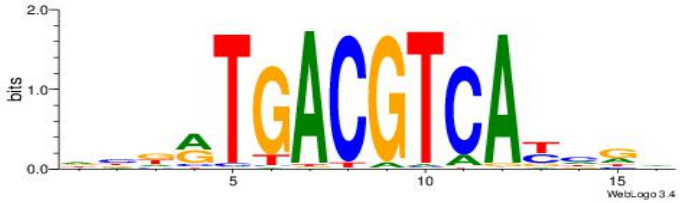
Motif ID:	UP00020
Motif name:	Atf1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.0267132

Alignment:

```
DMDMTGACGTCAKHBD
KYKCTGAGTTYA----
```

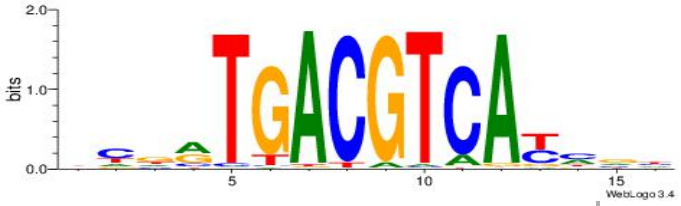
Original motif

Consensus sequence: DBDRTGACGTCAYHRD



Reverse complement motif

Consensus sequence: DMDMTGACGTCAKHBD



Motif ID:	UP00014
Motif name:	Sox17_secondary

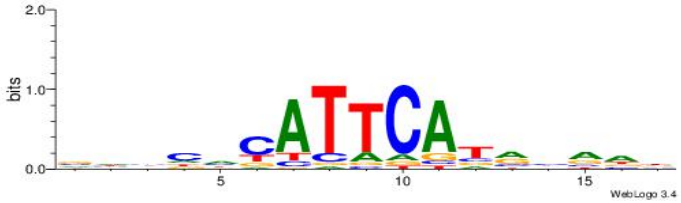
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	12
Similarity score:	0.0270855

Alignment:

```
DDBDKATGAATGHDBHV
--KYKCTGAGTTYA---
```

Original motif

Consensus sequence: VHBHHCATTCATRHVDD



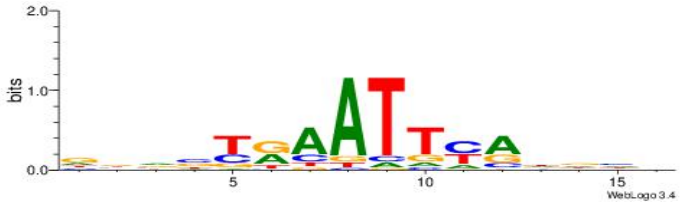
Reverse complement motif

Consensus sequence: DDBDKATGAATGHDBHV

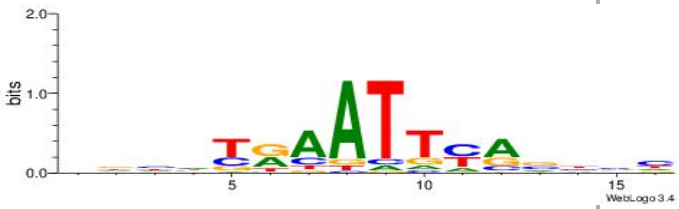
Motif ID:	UP00064
Motif name:	Sox18_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.0271199

Alignment:
DBVBTRAATTYADDHV
KYKCTGAGTTYA----

Original motif
Consensus sequence: DBVBTRAATTYADDHV



Reverse complement motif
Consensus sequence: VDHDTKAATTMABBBH

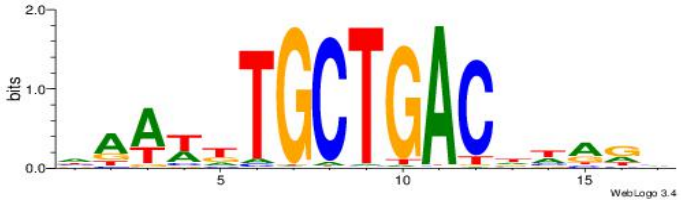


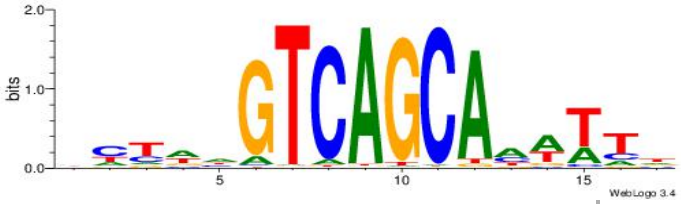
Motif ID:	UP00045
Motif name:	Mafb_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	12
Similarity score:	0.0301995

Alignment:
DMTWDGTCAGCADWTTH
-TKAACTCAGRMR----

Original motif
Consensus sequence: HAAWDTGCTGACDWARH

Reverse complement motif
Consensus sequence: DMTWDGTCAGCADWTTH





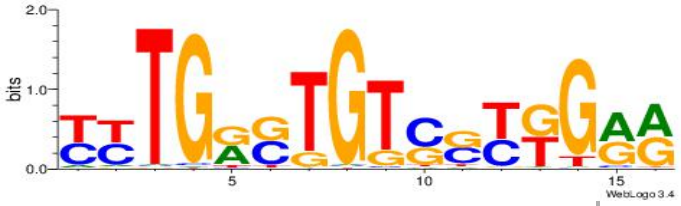
Dataset #: 1 Motif ID: 150 Motif name: C150

Original motif

Consensus sequence: YYCMRSSACASYCARR

Reverse complement motif

Consensus sequence: KKTGKSTGTSSKRGMM



Best Matches for Motif ID 150 (Highest to Lowest)

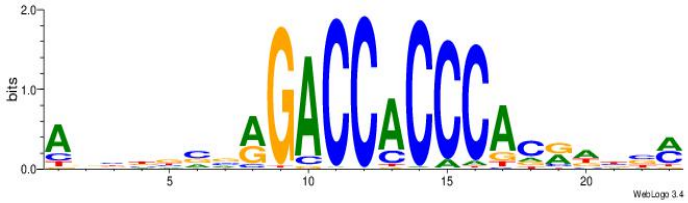
Motif ID:	UP00540
Motif name:	Gli3_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	16
Similarity score:	0.022327

Alignment:

ABBBBVVRGACCACCCACRDBBM
---YYCMRSSACASYCARR----

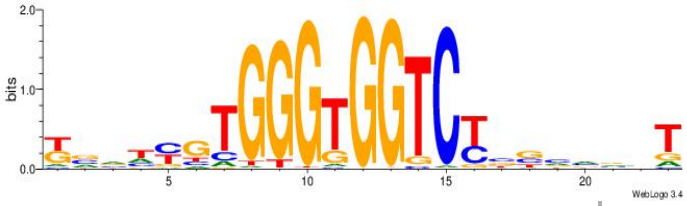
Original motif

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:	Forward
Position number:	3
Number of overlap:	16
Similarity score:	0.0227877

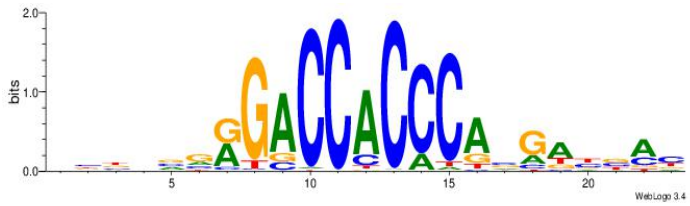
Alignment:
BBBDVVRGACCACCCAVGABBAB
--YYCMRSSACASYCARR-----

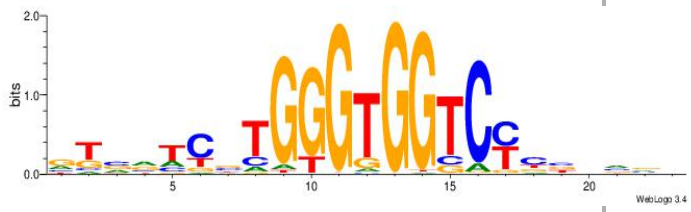
Original motif

Consensus sequence: BBBDVVRGACCACCCAVGABBAB

Reverse complement motif

Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB





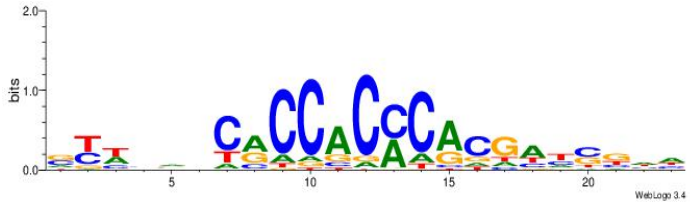
Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	16
Similarity score:	0.0235838

Alignment:

```
VYWVVHCRCCACMCACGAHSBHH
-YYCMRSSACASYCARR------
```

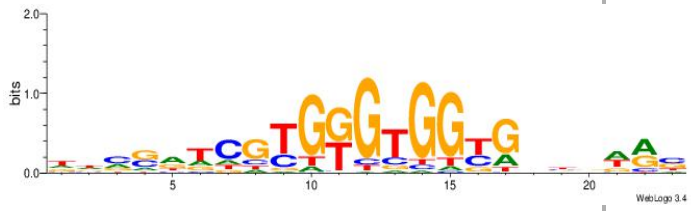
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



Motif ID:	UP00538

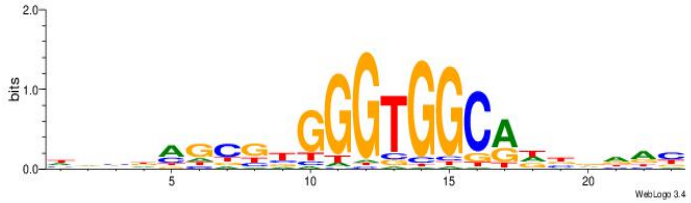
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	16
Similarity score:	0.0250268

Alignment:

```
BDDHVDKGCCACCCVCGCTDBVH
-YYCMRSSACASYCARR------
```

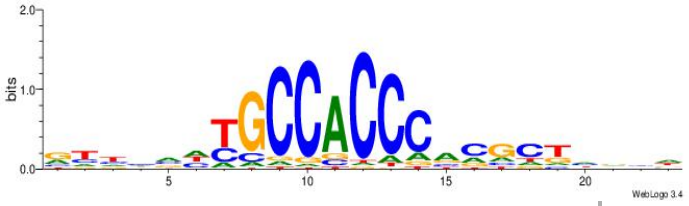
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH

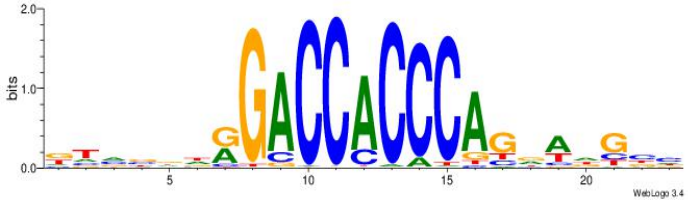


Motif ID:	UP00539
Motif name:	Gli2_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	16

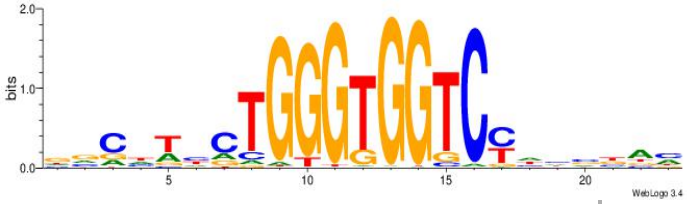
Similarity score: 0.0265224

Alignment:
DTVBDDRGACCACCCAGDWDGBH
--YYCMRSSACASYCARR-----

Original motif
Consensus sequence: DTVBDDRGACCACCCAGDWDGBH

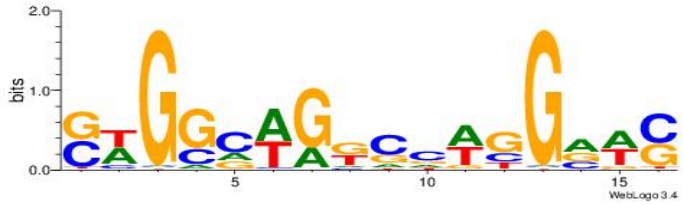


Reverse complement motif
Consensus sequence: DBCDWHCTGGGTGGTCMDHBBAH

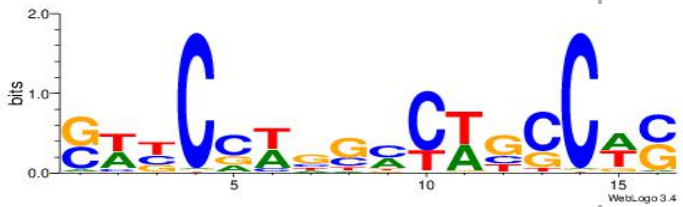


Dataset #: 1 Motif ID: 151 Motif name: C151

Original motif
Consensus sequence: SWGGCWGKCCWGGVWS



Reverse complement motif
Consensus sequence: SWBCCWGGYCWGCCWS



Best Matches for Motif ID 151 (Highest to Lowest)

Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif

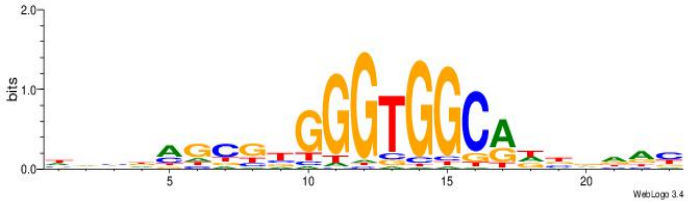
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8
Number of overlap:	16
Similarity score:	0.0274084

Alignment:

```
HVBDAGCGBGGGTGGCRDBDDDB
-------SWGGCWGKCCWGGVWS
```

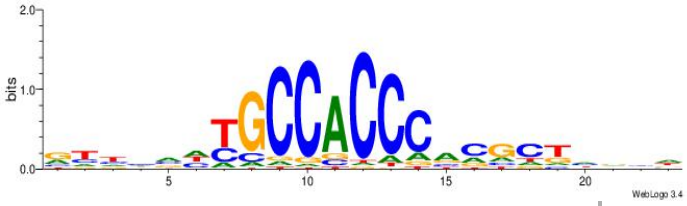
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



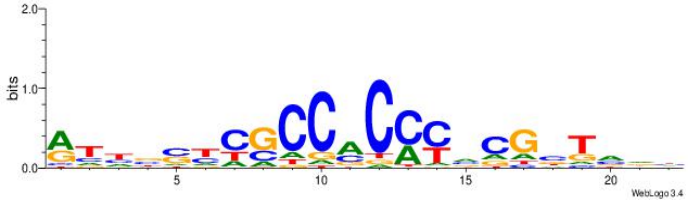
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	16
Similarity score:	0.0288558

Alignment:

```
RTHBSYCGCCMCMYVCGBTVDH
------SWGGCWGKCCWGGVWS
```

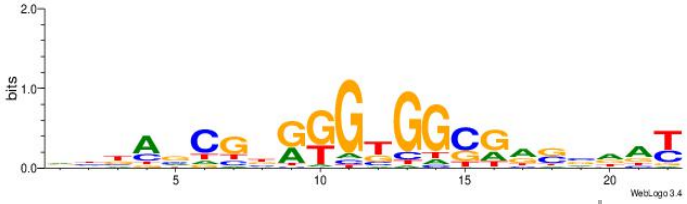
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



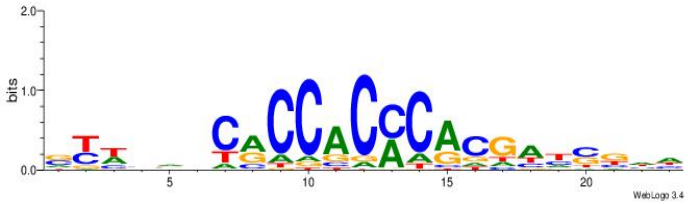
Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	8
Number of overlap:	16
Similarity score:	0.0368282

Alignment:

```
VYWVVHCRCCACMCACGAHSBHH
SWBCCWGGYCWGCCWS-------
```

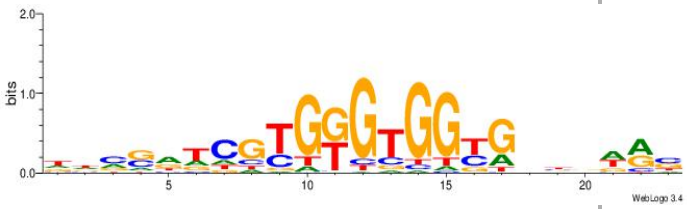
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



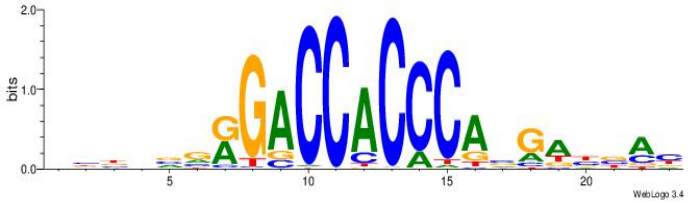
Motif ID:	UP00538
Motif name:	Gli1_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	7
Number of overlap:	16
Similarity score:	0.0424675

Alignment:

```
BBBDVVRGACCACCCAVGABBAB
-SWBCCWGGYCWGCCWS------
```

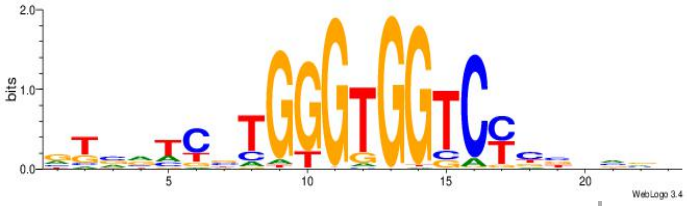
Original motif

Consensus sequence: BBBDVVRGACCACCCAVGABBAB



Reverse complement motif

Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB



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

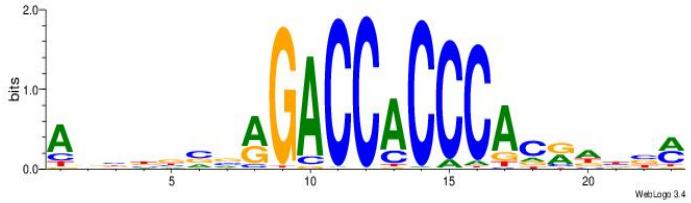
Position number:	3
Number of overlap:	16
Similarity score:	0.04298

Alignment:

```
ABBBBVVRGACCACCCACRDBBM
--SWBCCWGGYCWGCCWS-----
```

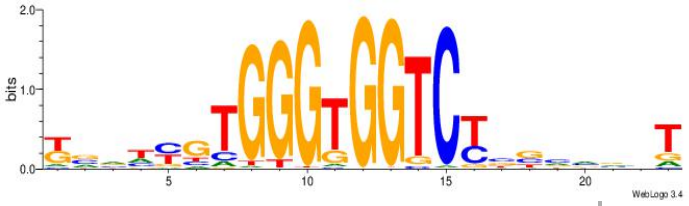
Original motif

Consensus sequence: ABBBBVVRGACCACCCACRDBBM



Reverse complement motif

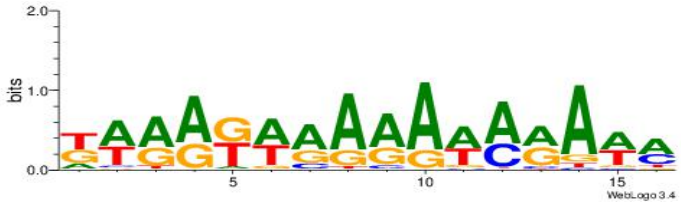
Consensus sequence: YBVDMGTGGGTGGTCKVVBVBBT



Dataset #: 1 Motif ID: 152 Motif name: C152

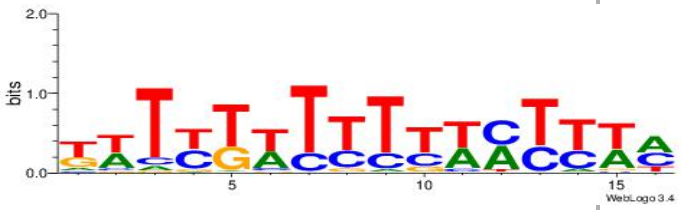
Original motif

Consensus sequence: KWRRKWRARAWMRAWM



Reverse complement motif

Consensus sequence: YWTKYWTKTKWYKKWR



Best Matches for Motif ID 152 (Highest to Lowest)

Motif ID:	UP00077
Motif name:	Srf_secondary

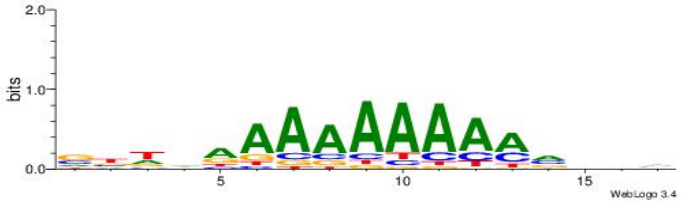
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	16
Similarity score:	0.0218448

Alignment:

```
HHVBYTTTTTTTTDDVV
YWTKYWTKTKWYKKWR-
```

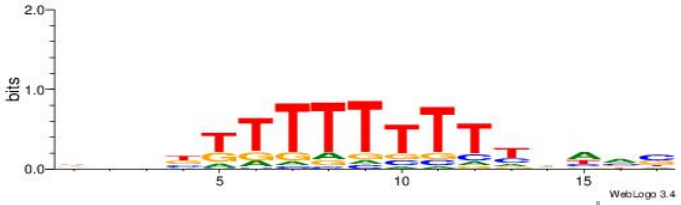
Original motif

Consensus sequence: VBDDAAAAAAAAMVBHH



Reverse complement motif

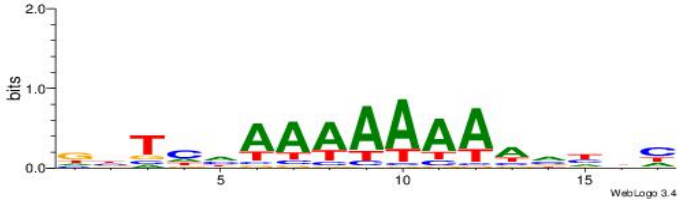
Consensus sequence: HHVBYTTTTTTTTDDVV



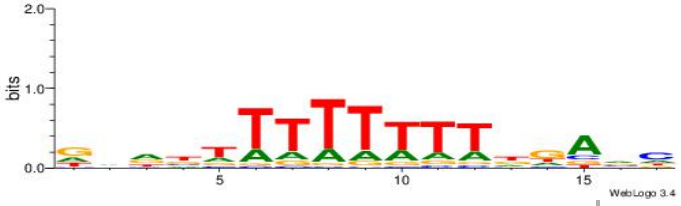
Motif ID:	UP00090
Motif name:	Elf3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	16
Similarity score:	0.038475

Alignment:
DDHBTTTTTTTTHDAVH
-YWTKYWTKTKWYKKWR

Original motif
Consensus sequence: DBTHHAAAAAAAAVHDH



Reverse complement motif
Consensus sequence: DDHBTTTTTTTTHDAVH

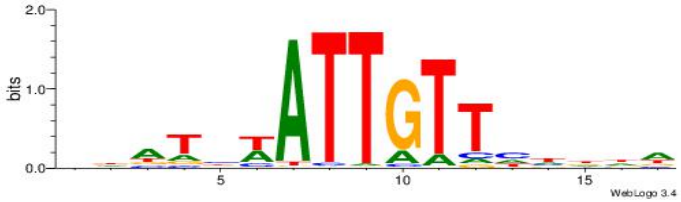


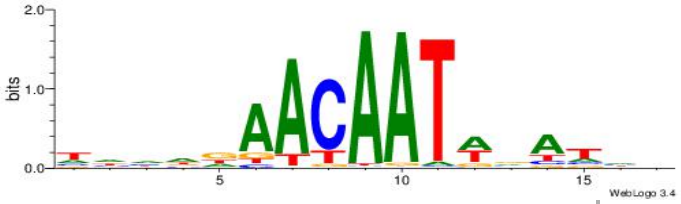
Motif ID:	UP00051
Motif name:	Sox8_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	16
Similarity score:	0.0392698

Alignment:
DDDHDAACAATWBATDD
-YWTKYWTKTKWYKKWR

Original motif
Consensus sequence: DDATBWATTGTTHHDDD

Reverse complement motif
Consensus sequence: DDDHDAACAATWBATDD





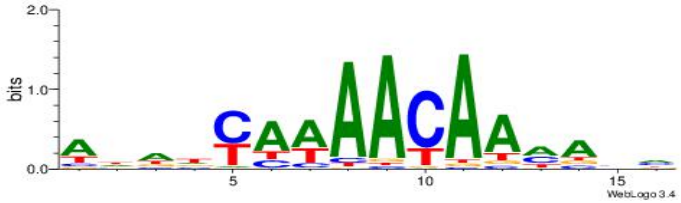
Motif ID:	UP00061
Motif name:	Foxl1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	16
Similarity score:	0.0401556

Alignment:

```
HDTYTTGTTWTKDDDT
YWTKYWTKTKWYKKWR
```

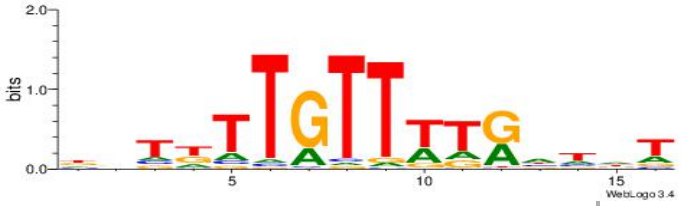
Original motif

Consensus sequence: ADDDYAWAACAAMAHH



Reverse complement motif

Consensus sequence: HDTYTTGTTWTKDDDT



Motif ID:	UP00255
Motif name:	Dbx1

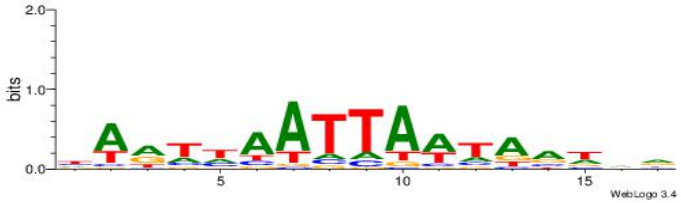
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	16
Similarity score:	0.0410382

Alignment:

```
HARTHAATTAWTAVDHD
KWRRKWRARAWMRAWM-
```

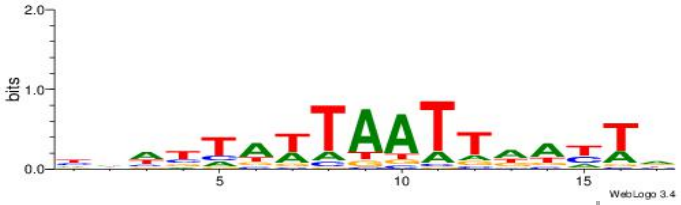
Original motif

Consensus sequence: HARTHAATTAWTAVDHD



Reverse complement motif

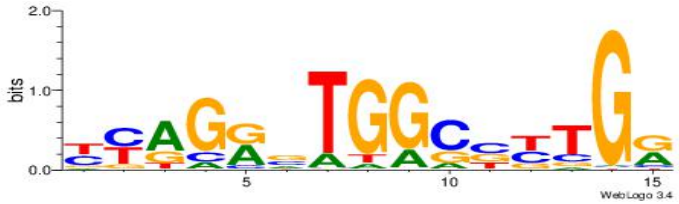
Consensus sequence: DHDBTAWTAATTHAKTH



Dataset #: 1 Motif ID: 153 Motif name: C153

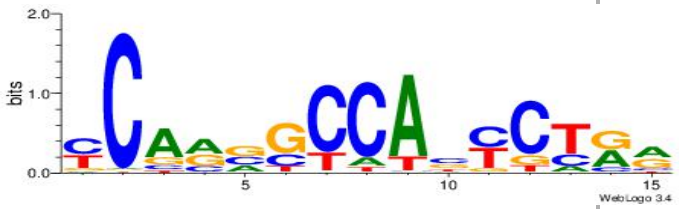
Original motif

Consensus sequence: YYAGRVTGGCBYTGR



Reverse complement motif

Consensus sequence: MCAMBGCCAVMCTKM



Best Matches for Motif ID 153 (Highest to Lowest)

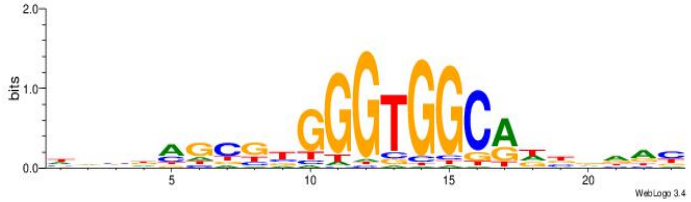
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	7
Number of overlap:	15
Similarity score:	0.0398267

Alignment:

```
HVBDAGCGBGGGTGGCRDBDDDB
------YYAGRVTGGCBYTGR--
```

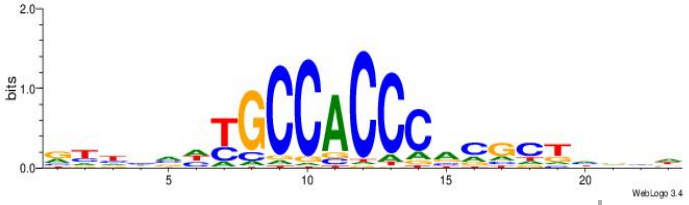
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement

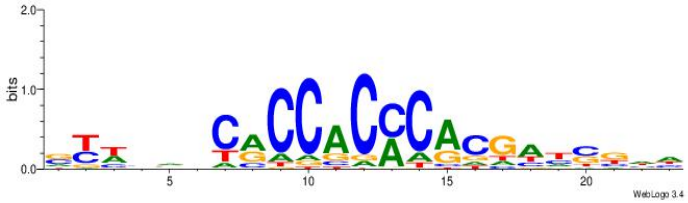
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	15
Similarity score:	0.0410774

Alignment:

```
VYWVVHCRCCACMCACGAHSBHH
--MCAMBGCCAVMCTKM------
```

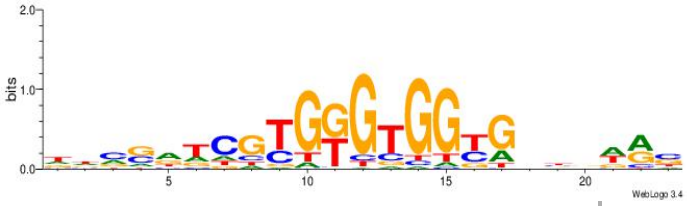
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



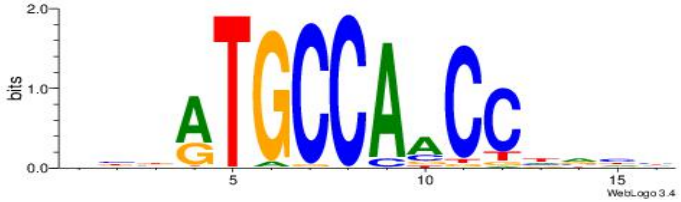
Motif ID:	UP00035
Motif name:	Hic1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	15
Similarity score:	0.0449339

Alignment:

```
DDBHGGTTGGCATVBD
MCAMBGCCAVMCTKM-
```

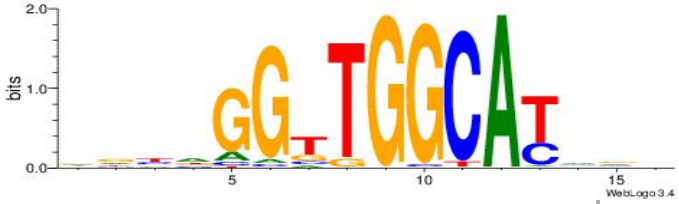
Original motif

Consensus sequence: DBBATGCCAACCHVHH



Reverse complement motif

Consensus sequence: DDBHGGTTGGCATVBD



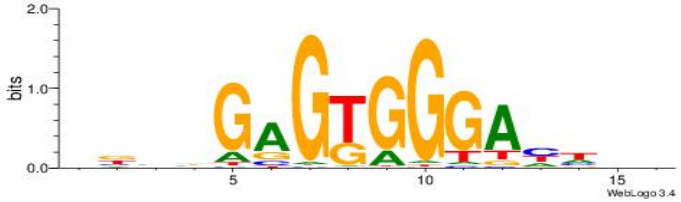
Motif ID:	UP00007
Motif name:	Egr1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	15
Similarity score:	0.0460502

Alignment:

```
BBHBGAGTGGGAHHDB
-YYAGRVTGGCBYTGR
```

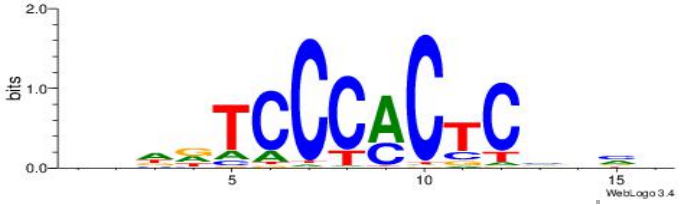
Original motif

Consensus sequence: BBHBGAGTGGGAHHDB



Reverse complement motif

Consensus sequence: BHHDTCCCACTCBDBV



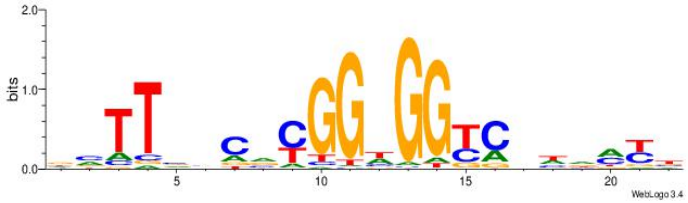
Motif ID:	UP00540
Motif name:	Gli3_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	15
Similarity score:	0.0461303

Alignment:

```
VMYDHDGMCCHCCKBGVVAAVH
-MCAMBGCCAVMCTKM------
```

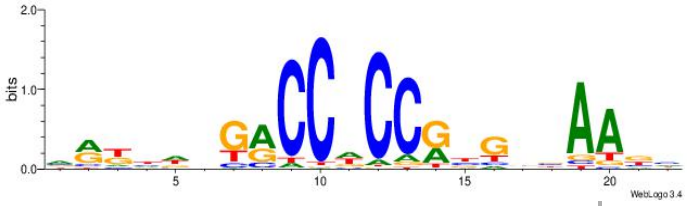
Original motif

Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



Reverse complement motif

Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH



Results created by MOTIFSIM on 06-18-2018 16:00:12
Runtime: 1179.17 seconds

MOTIFSIM is written by Ngoc Tam L. Tran
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