



MOTIFSIM - MOTIF SIMilarity Detection Tool

Version 2.2

INPUT

Input Parameters

Number of files:	5
Number of top significant motifs:	5
Number of best matches:	5
Similarity cutoff \geq	0.75
Matching motif database:	UniProbe Mus Musculus
Motif tree:	Yes
Combined similar motifs:	Yes
Output file type:	All
Output file format:	All

Input files and motif counts

File name	Count of motifs	Dataset number
DREME_DM230.txt	1	1
MEME_DM230.txt	20	2
PScanChIP_DM230.txt	14	3
RSAT_peak-motifs_DM230.txt	10	4
W-ChIPMotifs_DM230.txt	11	5

RESULTS

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

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

Original motif

Consensus sequence: GGCGGGGC



Reverse complement motif

Consensus sequence: GCCCGGCC



Best Matches for Motif ID 1 (Highest to Lowest)

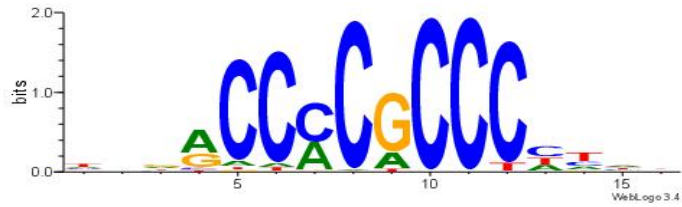
Motif ID:	UP00093
Motif name:	Klf7_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	8
Similarity score:	0

Alignment:

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

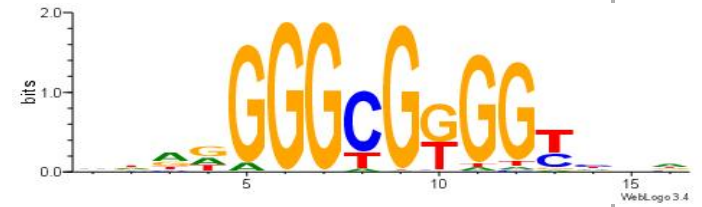
Original motif

Consensus sequence: HBDRCCMCGCCCHHHD



Reverse complement motif

Consensus sequence: DHHDGGGCGRGGKHBH



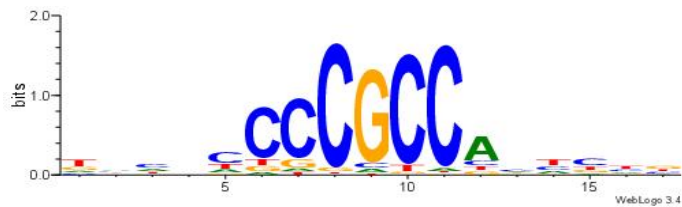
Motif ID: [UP00000](#)
 Motif name: Smad3_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 7
 Number of overlap: 8
 Similarity score: 0.00617043

Alignment:

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

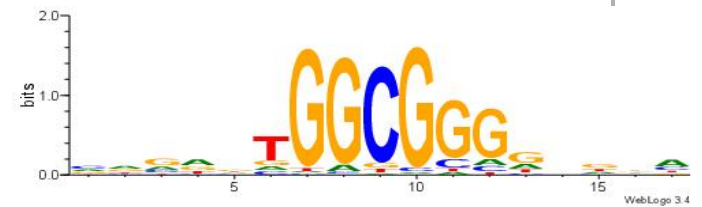
Original motif

Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif

Consensus sequence: BHBHDTGGCGGGBDHD



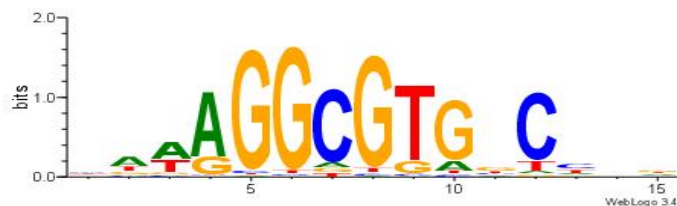
Motif ID: [UP00002](#)
Motif name: Sp4_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 5
Number of overlap: 8
Similarity score: 0.0145996

Alignment:

BDWAGGCGTGBCHHD
----GGCGGGC---

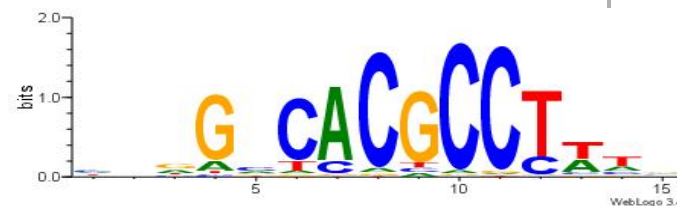
Original motif

Consensus sequence: BDWAGGCGTGBCHHD



Reverse complement motif

Consensus sequence: HHDGBCACGCCTWDB



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

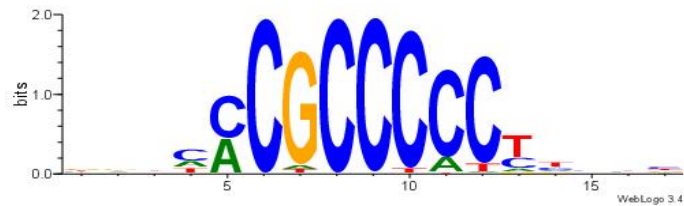
Position number: 2
Number of overlap: 8
Similarity score: 0.0233506

Alignment:

BDHHMCGCCCCCTHVBB
-GCCCCGCC-----

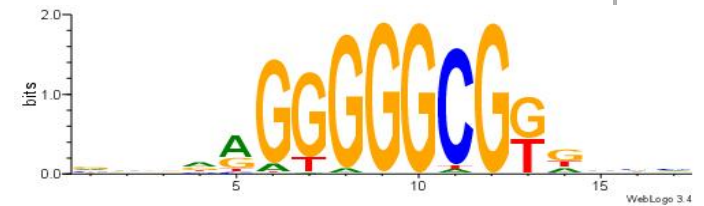
Original motif

Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif

Consensus sequence: BVVHAGGGGGCGRDHHB



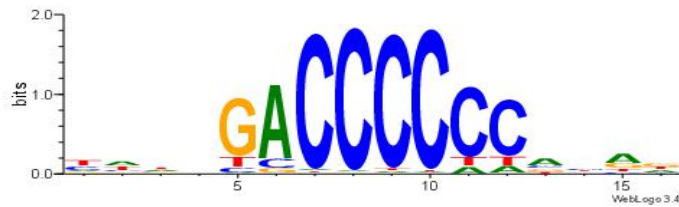
Motif ID: [UP00024](#)
Motif name: Glis2_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 5
Number of overlap: 8
Similarity score: 0.0291232

Alignment:

HHHVGACCCCCCVBRD
----GCCCCGCC----

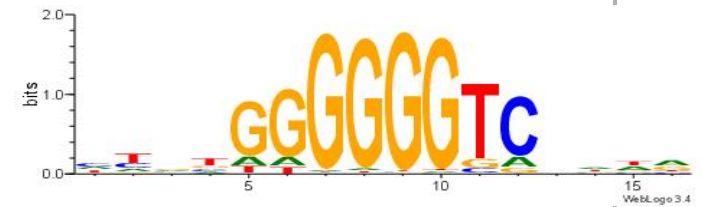
Original motif

Consensus sequence: HHHVGACCCCCVBRD



Reverse complement motif

Consensus sequence: HKBBGGGGGGTCVHHH



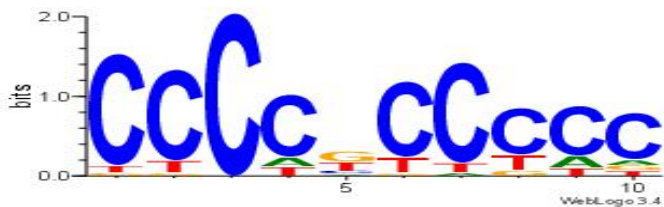
Dataset #: 3

Motif ID: 24

Motif name: SP1

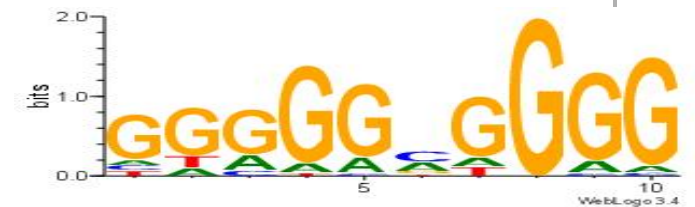
Original motif

Consensus sequence: CCCCKCCCC



Reverse complement motif

Consensus sequence: GGGGGYGGGG



Best Matches for Motif ID 24 (Highest to Lowest)

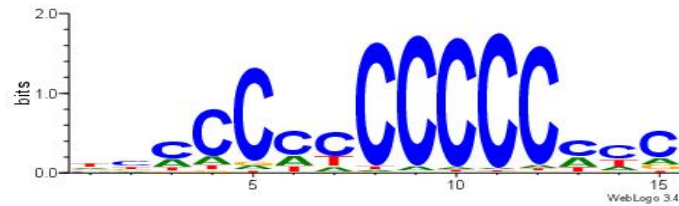
Motif ID:	UP00021
Motif name:	Zfp281_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	10
Similarity score:	0.0231018

Alignment:

```
DBCCCCCCCCCMYC  
--CCCKCCCC---
```

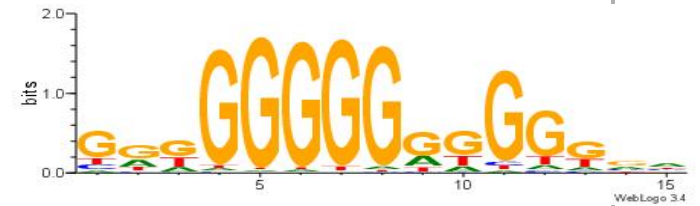
Original motif

Consensus sequence: DBCCCCCCCCCMYC



Reverse complement motif

Consensus sequence: GKRGGGGGGGGGGBD



Motif ID:	UP00093
Motif name:	Klf7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	10
Similarity score:	0.0303207

Alignment:

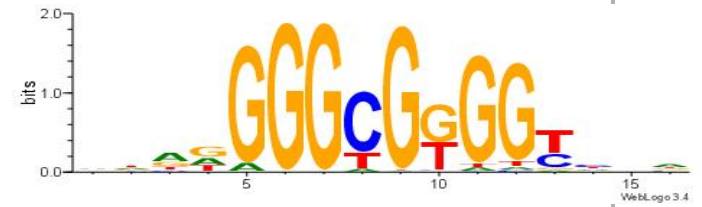
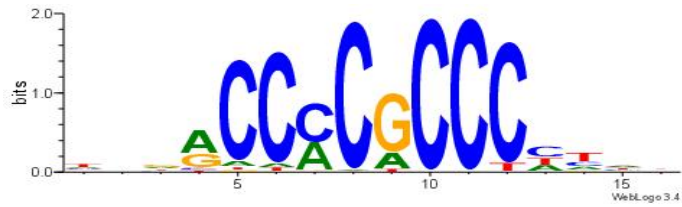
```
HBDRCCMCGCCCHHHD  
----CCCKCCCC--
```

Original motif

Consensus sequence: HBDRCCMCGCCCHHHD

Reverse complement motif

Consensus sequence: DHHDGGGCGRGGKHBH

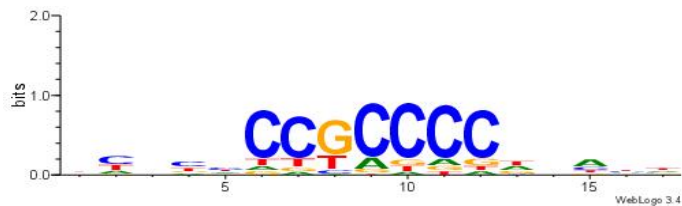


Motif ID: [UP00033](#)
 Motif name: Zfp410_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 5
 Number of overlap: 10
 Similarity score: 0.0323007

Alignment:
 HHHHDGGGGCGGDBHDV
 ----GGGGYGGG----

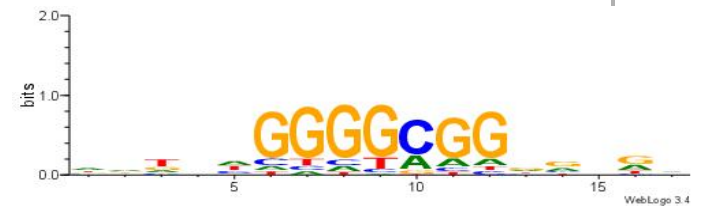
Original motif

Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif

Consensus sequence: HHHHDGGGGCGGDBHDV



Motif ID: [UP00099](#)

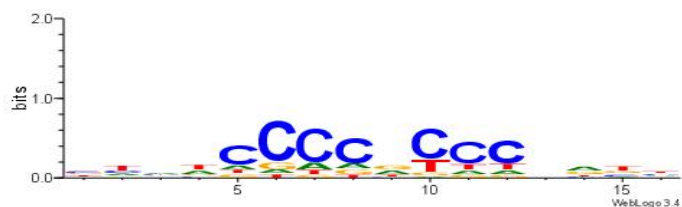
Motif name: Ascl2_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 3
 Number of overlap: 10
 Similarity score: 0.0340973

Alignment:

HVDVGGGHGGGGDBHB
 --GGGGYGGGG-----

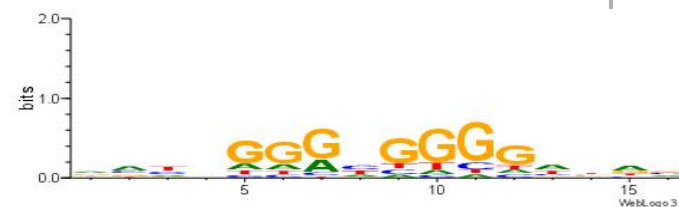
Original motif

Consensus sequence: BHVDCCCCDCCCBDBH



Reverse complement motif

Consensus sequence: HVDVGGGHGGGGDBHB



Motif ID: [UP00043](#)
 Motif name: Bcl6b_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 3
 Number of overlap: 10

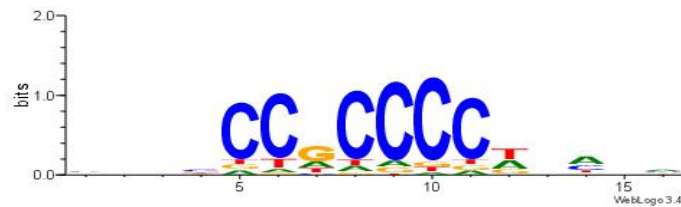
Similarity score: 0.0351051

Alignment:

BHHHWGGGGCGBBVH
----GGGGYGGG--

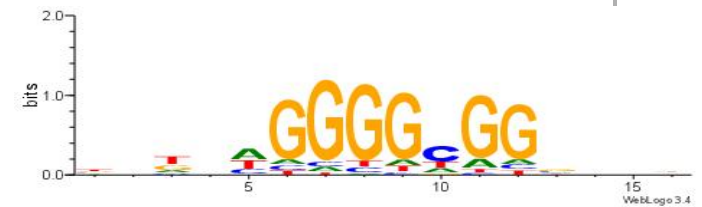
Original motif

Consensus sequence: HBBCCGCCCCWHHHV



Reverse complement motif

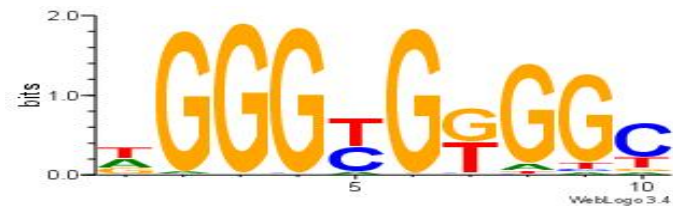
Consensus sequence: BHHHWGGGGCGBBVH



Dataset #: 3 Motif ID: 27 Motif name: Klf4

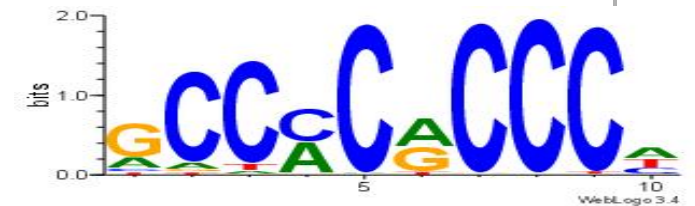
Original motif

Consensus sequence: DGGGYGKGGC



Reverse complement motif

Consensus sequence: GCCYCMCCCD



Best Matches for Motif ID 27 (Highest to Lowest)

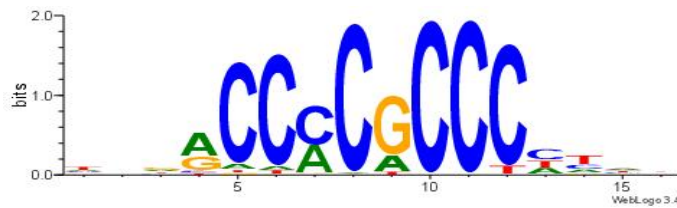
Motif ID: [UP00093](#)
Motif name: Klf7_primary
Species: Mus musculus
Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 4
 Number of overlap: 10
 Similarity score: 0

Alignment:
 DHH DGGGCGRGGKHBH
 ---DGGGYGKGGC---

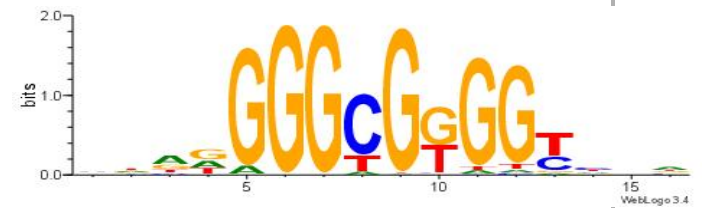
Original motif

Consensus sequence: HBDRCMCGCCCHHHD



Reverse complement motif

Consensus sequence: DHH DGGGCGRGGKHBH



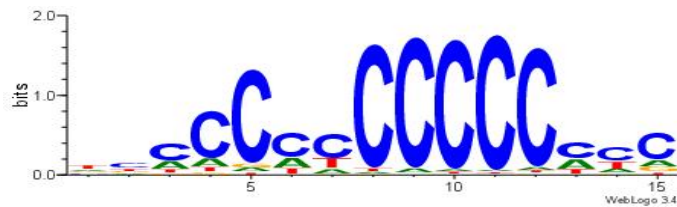
Motif ID: [UP00021](#)
 Motif name: Zfp281_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 4
 Number of overlap: 10
 Similarity score: 0.0153308

Alignment:

DBCCCCCCCCMYC
---GCCYCMCCCD---

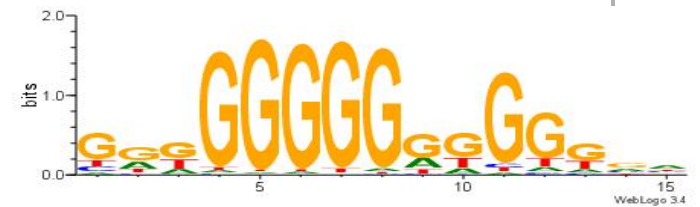
Original motif

Consensus sequence: DBCCCCCCCCMYC



Reverse complement motif

Consensus sequence: GKRGGGGGGGGGGBD



Motif ID: [UP00002](#)
Motif name: Sp4_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 3
Number of overlap: 10
Similarity score: 0.0186791

Alignment:

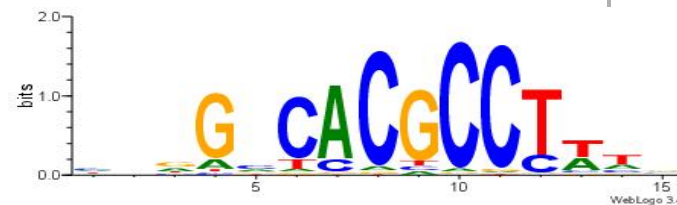
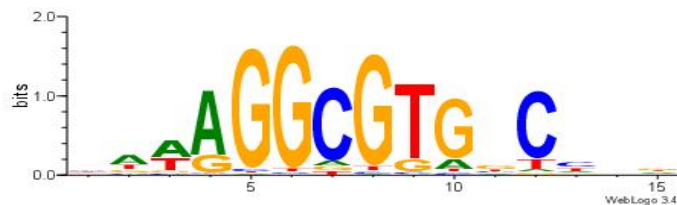
BDWAGGCGTG BCHHD
--DGGGYGKGGC---

Original motif

Consensus sequence: BDWAGGCGTG BCHHD

Reverse complement motif

Consensus sequence: HDDGBCACGCCTWDB

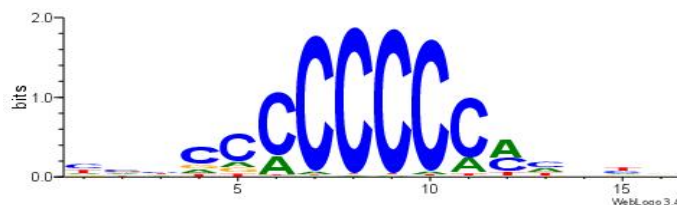


Motif ID: [UP00022](#)
 Motif name: Zfp740_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 3
 Number of overlap: 10
 Similarity score: 0.0218399

Alignment:
 HVBCCCCCCCCMHHHB
 --GCCYCMCCCD----

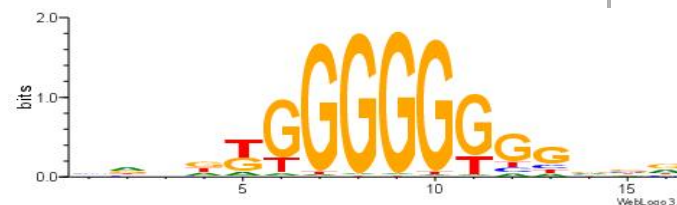
Original motif

Consensus sequence: HVBCCCCCCCCMHHHB



Reverse complement motif

Consensus sequence: BHHDYGGGGGGGBVD



Motif ID: [UP00007](#)

Motif name: Egr1_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 1
 Number of overlap: 10
 Similarity score: 0.0249586

Alignment:
 VHTGCGGGGGCGGH
 GCCYCMCCCD-----

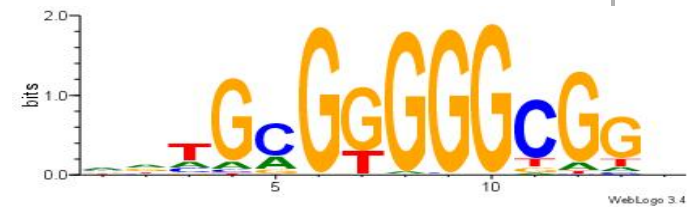
Original motif

Consensus sequence: HCCGCCCCCGCAHB



Reverse complement motif

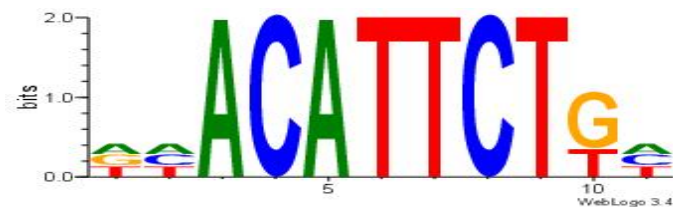
Consensus sequence: VHTGCGGGGGCGGH



Dataset #: 4 Motif ID: 44 Motif name: dhACATTCTkh

Original motif

Consensus sequence: DHACATTCTGH



Reverse complement motif

Consensus sequence: HCAGAATGTHD



Best Matches for Motif ID 44 (Highest to Lowest)

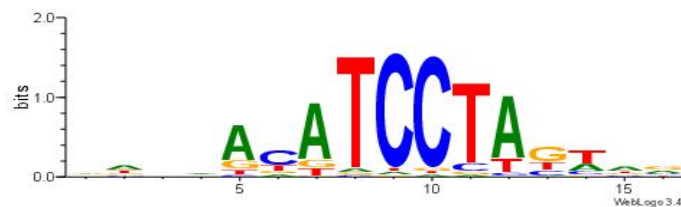
Motif ID: [UP00038](#)
Motif name: Spdef_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 4
Number of overlap: 11
Similarity score: 0.00581553

Alignment:

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

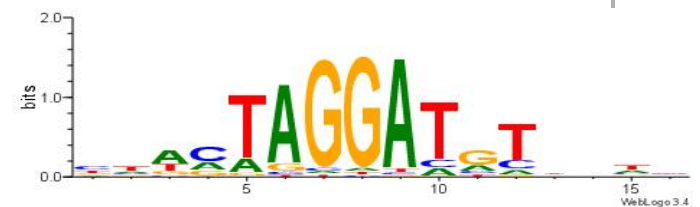
Original motif

Consensus sequence: DDBHACATCCTAKWDV



Reverse complement motif

Consensus sequence: VDWYTAGGATGTHVDH



Motif ID: [UP00528](#)
Motif name: Foxm1_secondary
Species: Mus musculus
Matching format of first motif: Original Motif

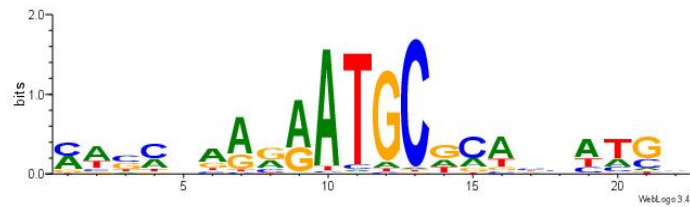
Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 8
 Number of overlap: 11
 Similarity score: 0.00582895

Alignment:

DCATDBTGHGCATKMTTBRSWR
 -----DHACATTCTGH-----

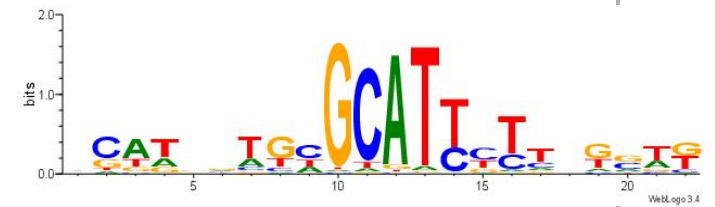
Original motif

Consensus sequence: MWSMBAARRATGCD CABHATGD



Reverse complement motif

Consensus sequence: DCATDBTGHGCATKMTTBRSWR



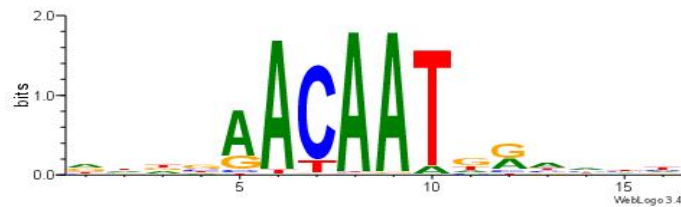
Motif ID: [UP00023](#)
 Motif name: Sox30_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 4
 Number of overlap: 11
 Similarity score: 0.00613057

Alignment:

HHHHMHATTGTTBDHD
--DHACATTCTGH---

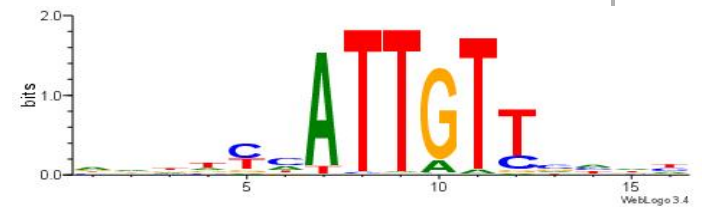
Original motif

Consensus sequence: DHDBAACAATDRHHHH



Reverse complement motif

Consensus sequence: HHHHMHATTGTTBDHD



Motif ID: [UP00034](#)
Motif name: Sox7_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 6
Number of overlap: 11
Similarity score: 0.0119275

Alignment:

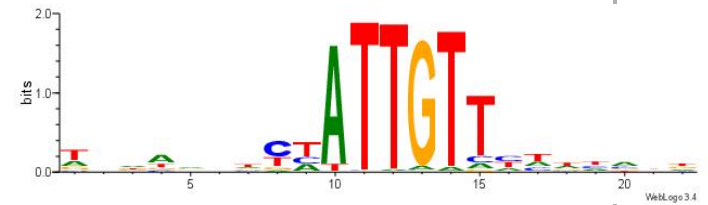
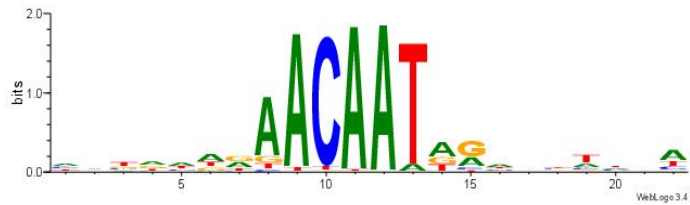
WBHHHHHMDATTGTTDHDVHH
-----DHACATTCTGH-----

Original motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW

Reverse complement motif

Consensus sequence: WBHHHHHMDATTGTTDHDVHH

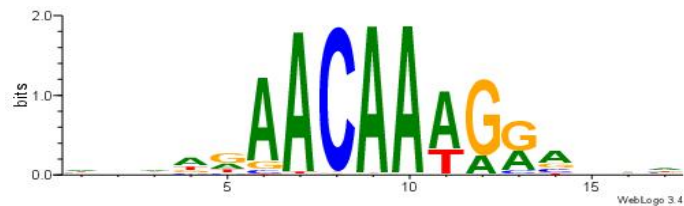


Motif ID: [UP00030](#)
 Motif name: Sox11_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 3
 Number of overlap: 11
 Similarity score: 0.0122803

Alignment:
 HHBTMCTTTGTTMDDVH
 --DHACATTCTGH----

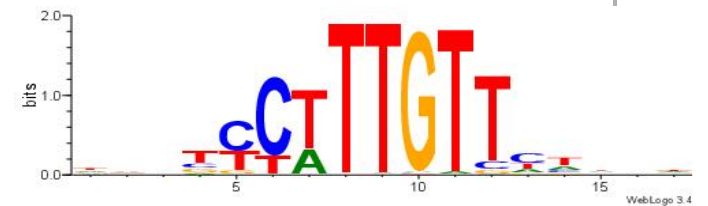
Original motif

Consensus sequence: HBDDRAACAAAGRABHH



Reverse complement motif

Consensus sequence: HHBTMCTTTGTTMDDVH



Dataset #: 4 Motif ID: 45 Motif name: wbgTAAATAww

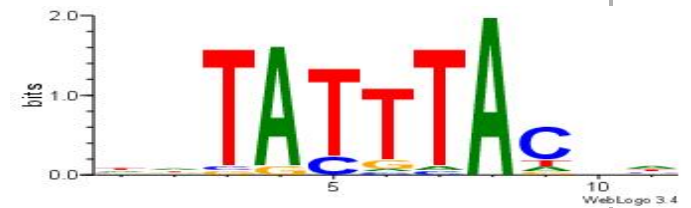
Original motif

Consensus sequence: DBGTAATAHD



Reverse complement motif

Consensus sequence: DHTATTTACBD



Best Matches for Motif ID 45 (Highest to Lowest)

Motif ID: [UP00242](#)
Motif name: Hoxc8
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 11
Similarity score: 0

Alignment:

AHDHTAATTACHHHHV

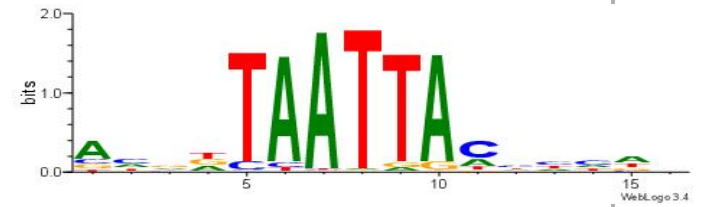
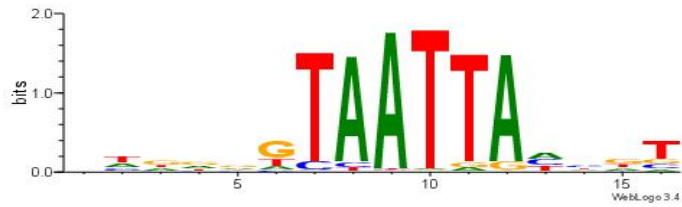
--DHTATTTACBD---

Original motif

Consensus sequence: BHDDDGTAAATTAHHDT

Reverse complement motif

Consensus sequence: AHDHTAATTACHHHHV



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

Alignment:
 HHWAWGTAAAYAAAVDB
 ---DBGTAAATAHD---

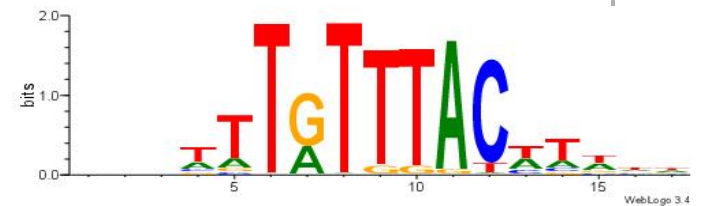
Original motif

Consensus sequence: HHWAWGTAAAYAAAVDB



Reverse complement motif

Consensus sequence: BDVTTTKTTTACWTWHH



Motif ID: [UP00039](#)

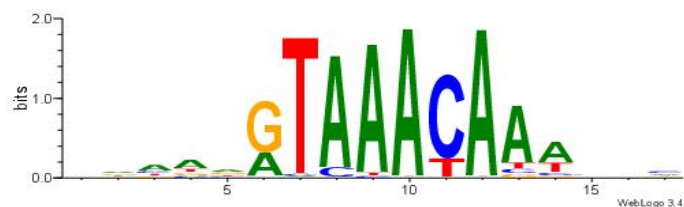
Motif name: Foxj3_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 4
 Number of overlap: 11
 Similarity score: 0.00490457

Alignment:

HDHADGTAAACAAAVVH
 ---DBGTAAATAHD---

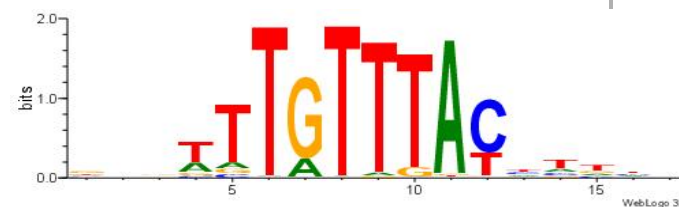
Original motif

Consensus sequence: HDHADGTAAACAAAVVH



Reverse complement motif

Consensus sequence: DVVTTTGTTCACDTHDH



Motif ID: [UP00041](#)
 Motif name: Foxj1_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 5
 Number of overlap: 11

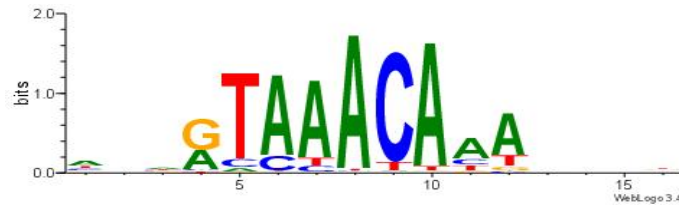
Similarity score: 0.00656547

Alignment:

HDHRTAAACAAHDDD
-DBGTAAATAHD----

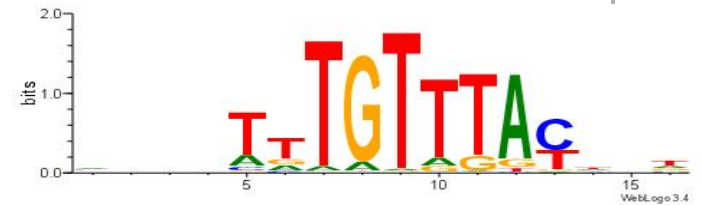
Original motif

Consensus sequence: HDHRTAAACAAHDDD



Reverse complement motif

Consensus sequence: DDDHTTTGTTTAMHDD



Motif ID: [UP00182](#)
Motif name: Hoxa6
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 3
Number of overlap: 11
Similarity score: 0.0086354

Alignment:

DTHHGGTAATTAYCYT
---DBGTAAATAHD--

Original motif

Consensus sequence: AMGKTAATTACCHHAD

Reverse complement motif

Consensus sequence: DTHHGGTAATTAYCYT



Results created by MOTIFSIM on 11-25-2023 17:44:26

Runtime: 331.085 seconds

MOTIFSIM is written by Ngoc Tam L. Tran

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