



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: | PDF |

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)

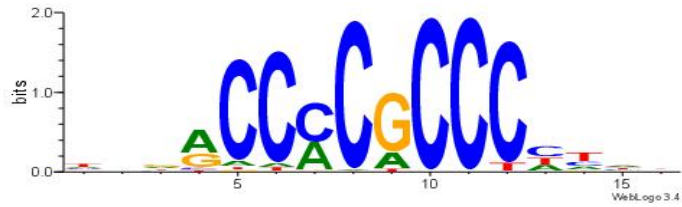
| | |
|----------------------------------|-------------------------|
| Motif ID: | UP00093 |
| Motif name: | Klf7_primary |
| Species: | Mus musculus |
| Matching format of first motif: | Reverse Complement |
| Matching format of second motif: | Original Motif |
| Direction: | Backward |
| Position number: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

Alignment:

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

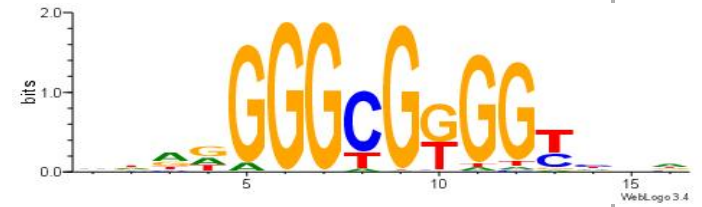
Original motif

Consensus sequence: HBDRCCMCGCCCHHHD



Reverse complement motif

Consensus sequence: DHHDGGGCGRGGKHBH



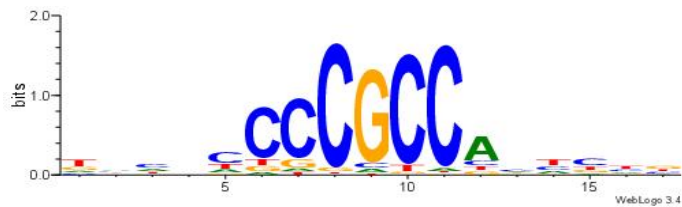
Motif ID: [UP00000](#)
 Motif name: Smad3_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 7
 Number of overlap: 8
 Similarity score: 0.00617043

Alignment:

BHBHDTGGCGGGBDHD
 -----GGCGGGGC----

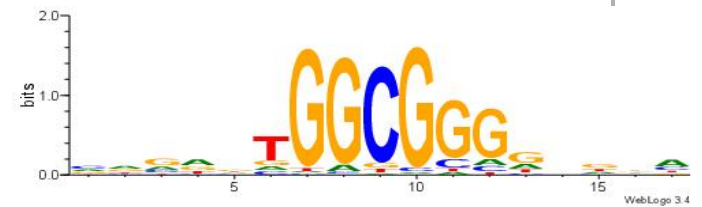
Original motif

Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif

Consensus sequence: BHBHDTGGCGGGBDHD



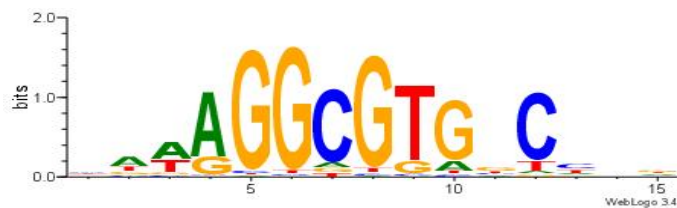
Motif ID: [UP00002](#)
Motif name: Sp4_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 5
Number of overlap: 8
Similarity score: 0.0145996

Alignment:

BDWAGGCGTGBCHHD
----GGCGGGC---

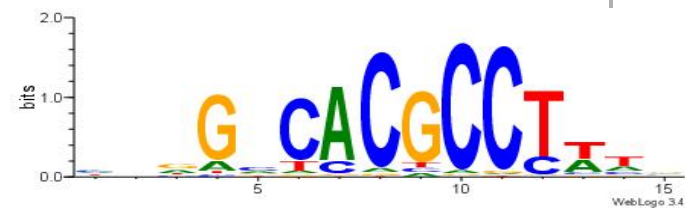
Original motif

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

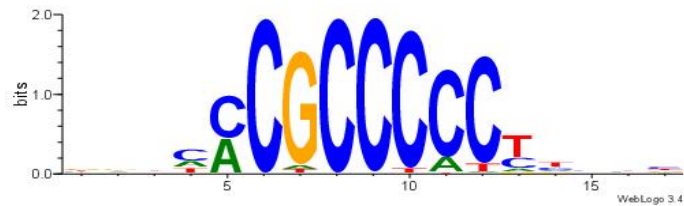
Position number: 2
Number of overlap: 8
Similarity score: 0.0233506

Alignment:

BDHHMCGCCCCCTHVBB
-GCCCCGCC-----

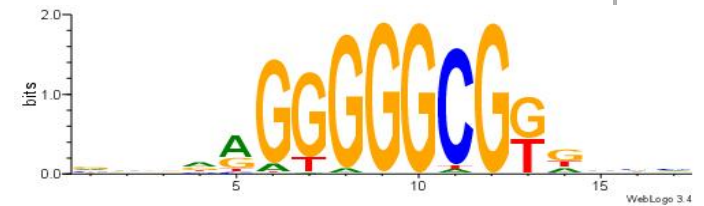
Original motif

Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif

Consensus sequence: BVVHAGGGGGCGRDHHB



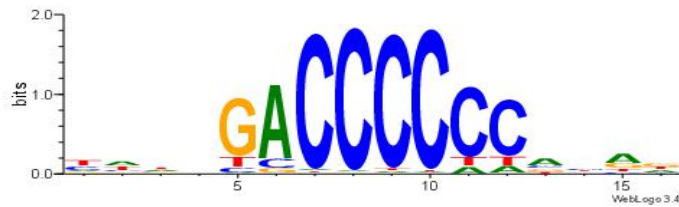
Motif ID: [UP00024](#)
Motif name: Glis2_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 5
Number of overlap: 8
Similarity score: 0.0291232

Alignment:

HHHVGACCCCCCVBRD
----GCCCCGCC----

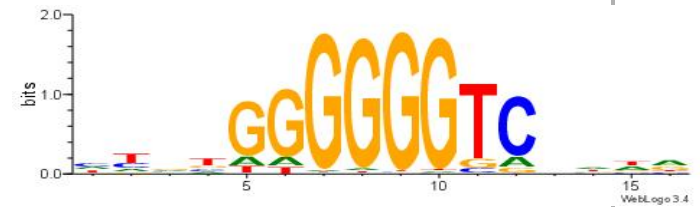
Original motif

Consensus sequence: HHHVGACCCCCVBRD



Reverse complement motif

Consensus sequence: HKBBGGGGGGTCVHHH



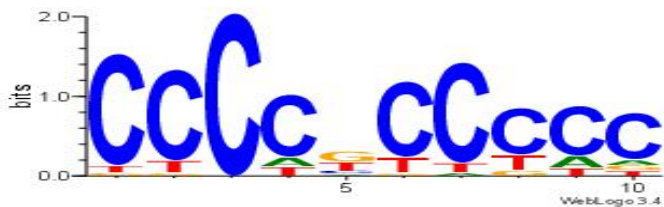
Dataset #: 3

Motif ID: 24

Motif name: SP1

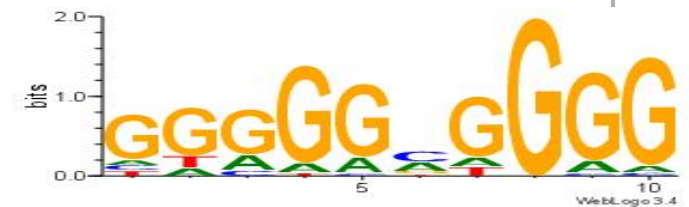
Original motif

Consensus sequence: CCCCKCCCC



Reverse complement motif

Consensus sequence: GGGGGYGGGG



Best Matches for Motif ID 24 (Highest to Lowest)

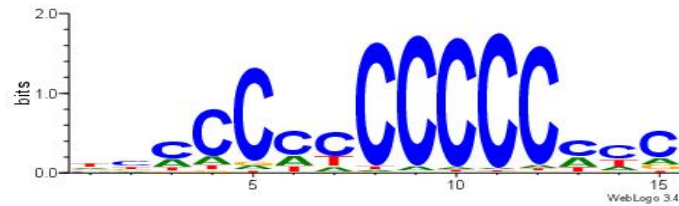
| | |
|----------------------------------|-------------------------|
| Motif ID: | UP00021 |
| Motif name: | Zfp281_primary |
| Species: | Mus musculus |
| Matching format of first motif: | Original Motif |
| Matching format of second motif: | Original Motif |
| Direction: | Backward |
| Position number: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

Alignment:

DBCCCCCCCCCMYC
--CCCCKCCCC--

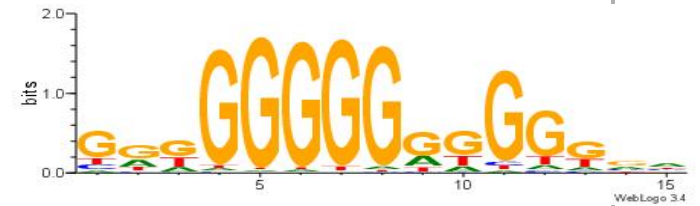
Original motif

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: Forward
Position number: 5
Number of overlap: 10
Similarity score: 0.0303207

Alignment:

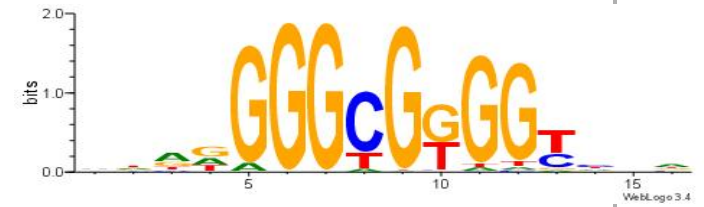
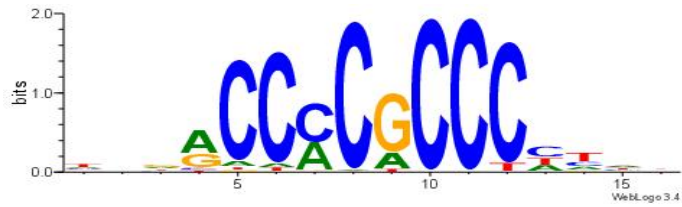
HBDRCCMCGCCCHHHD
----CCCCKCCCC--

Original motif

Consensus sequence: HBDRCCMCGCCCHHHD

Reverse complement motif

Consensus sequence: DHHDGGGCGRGGKHBH

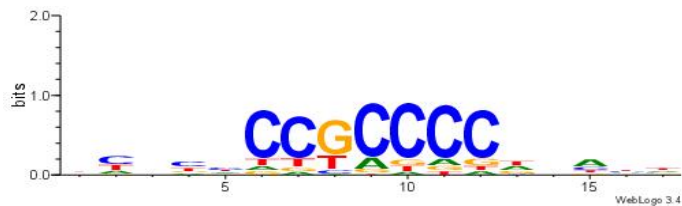


Motif ID: [UP00033](#)
 Motif name: Zfp410_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 5
 Number of overlap: 10
 Similarity score: 0.0323007

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

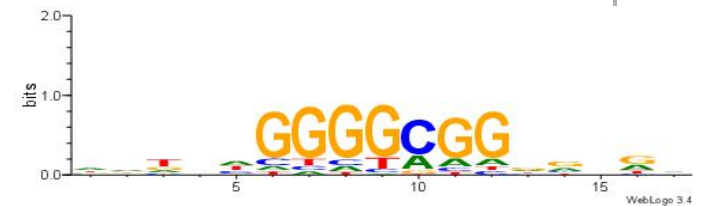
Original motif

Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif

Consensus sequence: HHHHDGGGGCGGDBHDV



Motif ID: [UP00099](#)

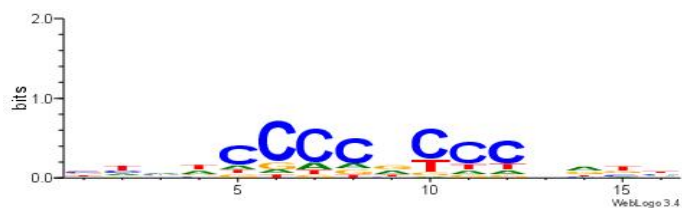
Motif name: Ascl2_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 3
 Number of overlap: 10
 Similarity score: 0.0340973

Alignment:

HVDVGGGGHGGGGDBHB
 --GGGGGYGGGG-----

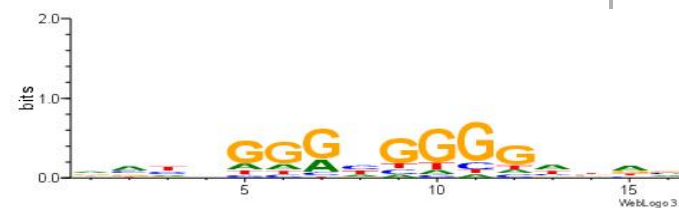
Original motif

Consensus sequence: BHVDCCCCDCCCBDBH



Reverse complement motif

Consensus sequence: HVDVGGGGHGGGGDBHB



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

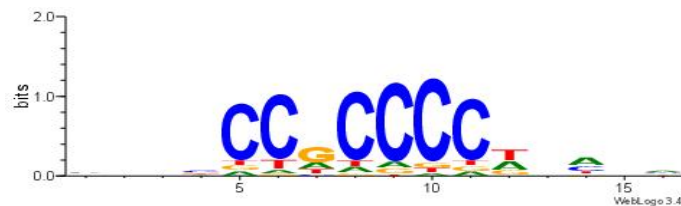
Alignment:

BHHHWGGGGCGBBVH

----GGGGYGGG--

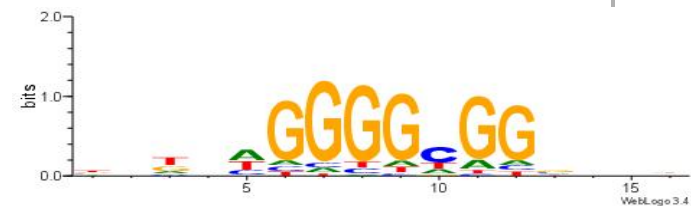
Original motif

Consensus sequence: HBBCCGCCCCWHHHV



Reverse complement motif

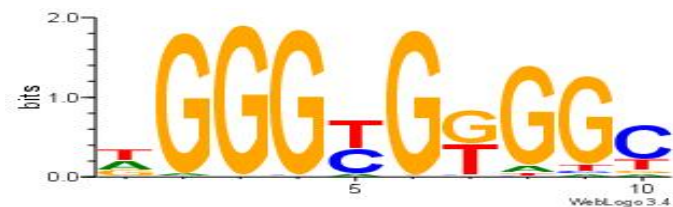
Consensus sequence: BHHHWGGGGCGBBVH



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

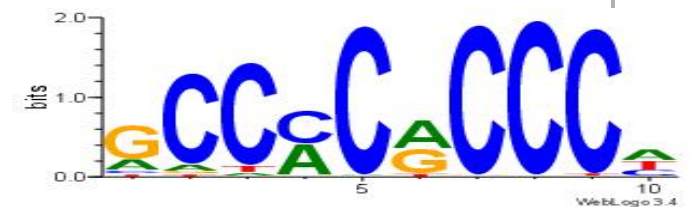
Original motif

Consensus sequence: DGGGYGKGGC



Reverse complement motif

Consensus sequence: GCCYCMCCCD



Best Matches for Motif ID 27 (Highest to Lowest)

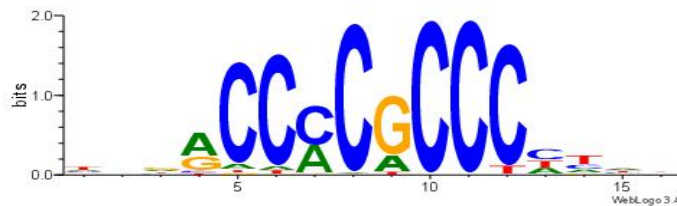
Motif ID: [UP00093](#)
Motif name: Klf7_primary
Species: Mus musculus
Matching format of first motif: Original Motif

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

Alignment:
 DHHDGGGCGRGGKHBH
 ---DGGGYGKGGC---

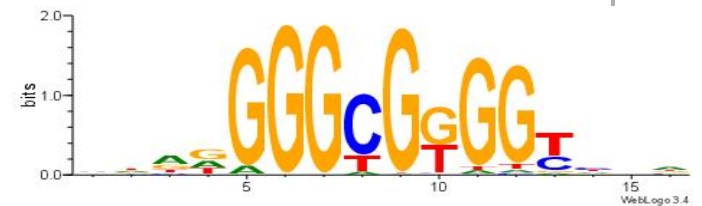
Original motif

Consensus sequence: HBDRCMCGCCCHHHD



Reverse complement motif

Consensus sequence: DHHDGGGCGRGGKHBH



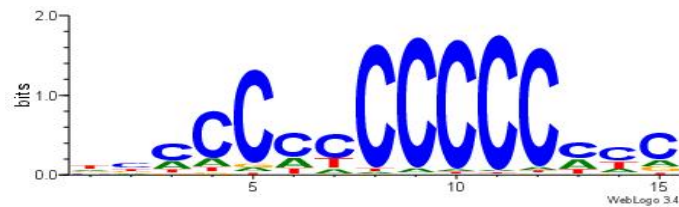
Motif ID: [UP00021](#)
 Motif name: Zfp281_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 4
 Number of overlap: 10
 Similarity score: 0.0153308

Alignment:

DBCCCCCCCCMYC
---GCCYCMCCCD---

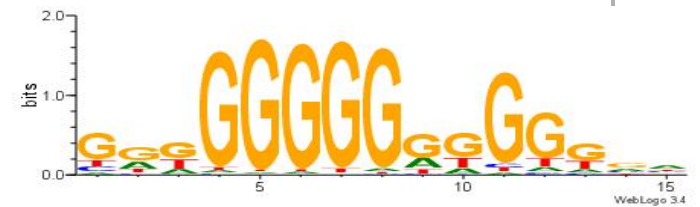
Original motif

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

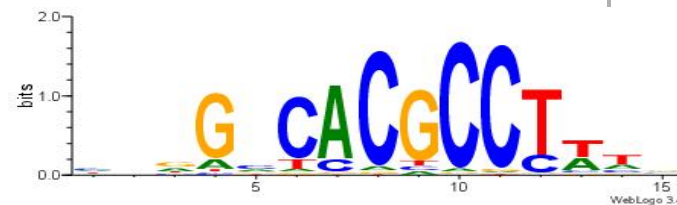
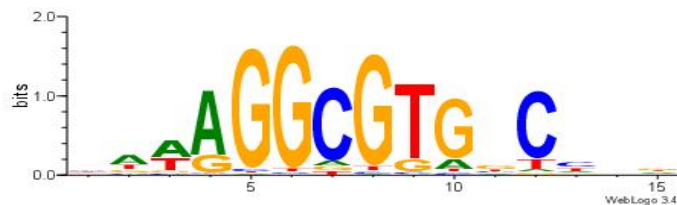
Alignment:
BDWAGGCGTG BCHHD
--DGGGYGKGGC---

Original motif

Consensus sequence: BDWAGGCGTG BCHHD

Reverse complement motif

Consensus sequence: HDDGBCACGCCTWDB

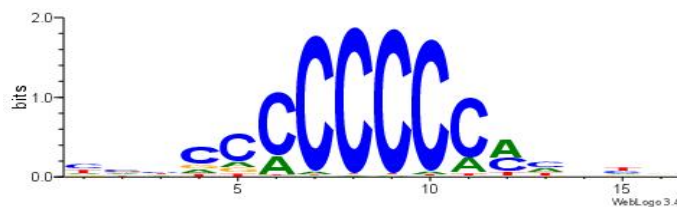


Motif ID: [UP00022](#)
 Motif name: Zfp740_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 3
 Number of overlap: 10
 Similarity score: 0.0218399

Alignment:
 HVBCCCCCCCCMHHHB
 --GCCYCMCCCD----

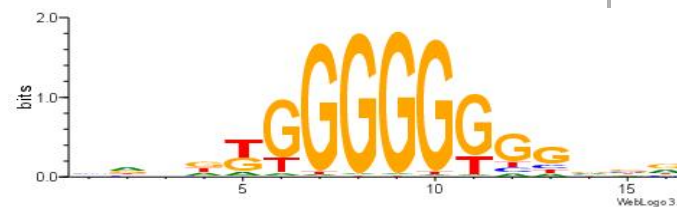
Original motif

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-----

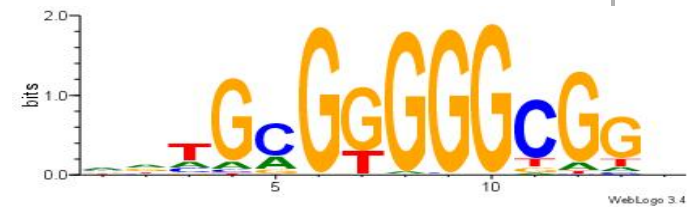
Original motif

Consensus sequence: HCCGCCCCCGCAHB



Reverse complement motif

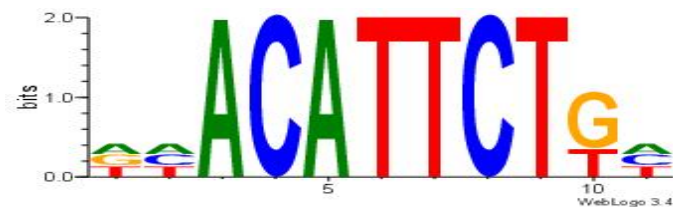
Consensus sequence: VHTGCGGGGGCGGH



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)

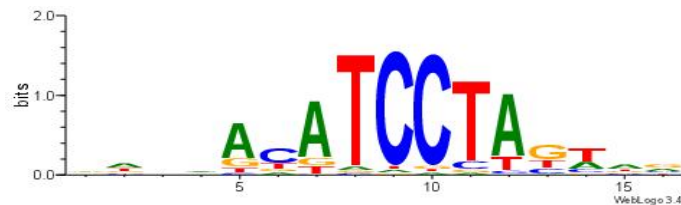
Motif ID: [UP00038](#)
Motif name: Spdef_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 4
Number of overlap: 11
Similarity score: 0.00581553

Alignment:

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

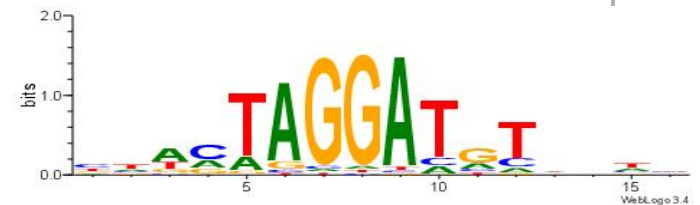
Original motif

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

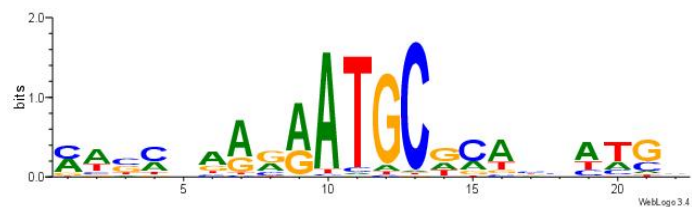
Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 8
 Number of overlap: 11
 Similarity score: 0.00582895

Alignment:

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

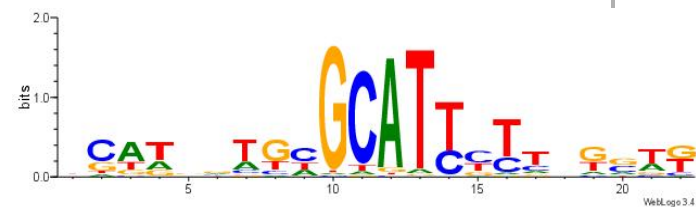
Original motif

Consensus sequence: MWSMBAARRATGCD CABHATGD



Reverse complement motif

Consensus sequence: DCATDBTGHGCATKMTTBRSWR



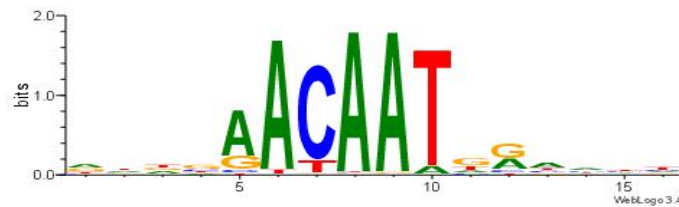
Motif ID: [UP00023](#)
 Motif name: Sox30_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 4
 Number of overlap: 11
 Similarity score: 0.00613057

Alignment:

HHHHMHATTGTTBDHD
--DHACATTCTGH---

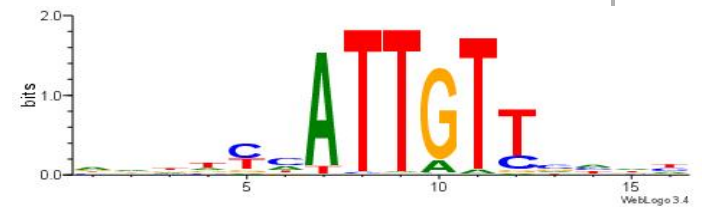
Original motif

Consensus sequence: DHDBAACAATDRHHHH



Reverse complement motif

Consensus sequence: HHHMHATTGTTBDHD



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

Alignment:

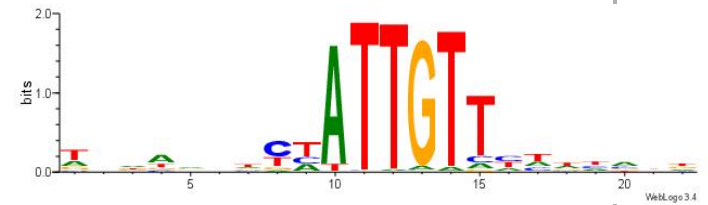
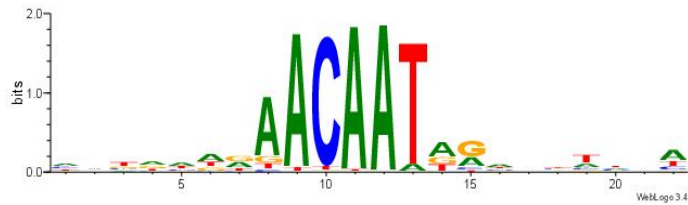
WBHHHHHMDATTGTTDHDVHH
-----DHACATTCTGH-----

Original motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW

Reverse complement motif

Consensus sequence: WBHHHHHMDATTGTTDHDVHH

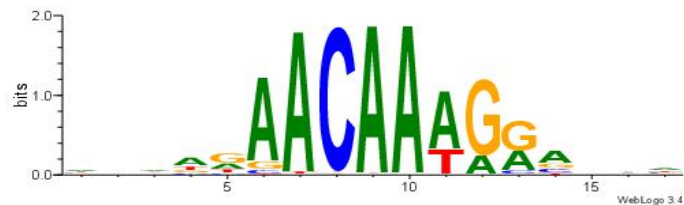


Motif ID: [UP00030](#)
 Motif name: Sox11_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 3
 Number of overlap: 11
 Similarity score: 0.0122803

Alignment:
 HHBTMCTTTGTTMDDVH
 --DHACATTCTGH----

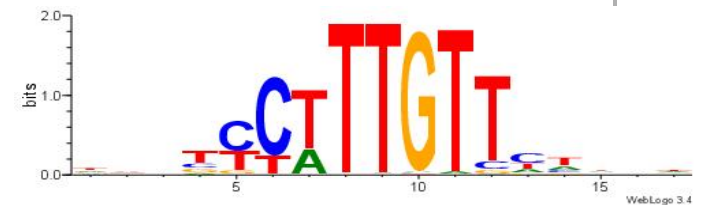
Original motif

Consensus sequence: HBDDRAACAAAGRABHH



Reverse complement motif

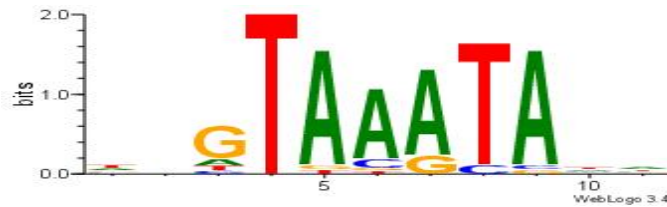
Consensus sequence: HHBTMCTTTGTTMDDVH



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

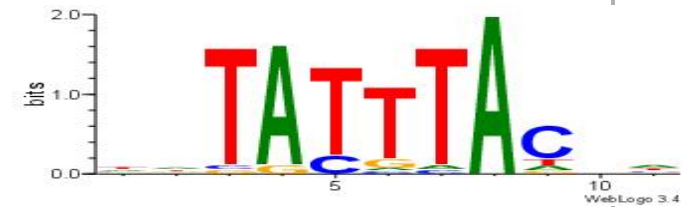
Original motif

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

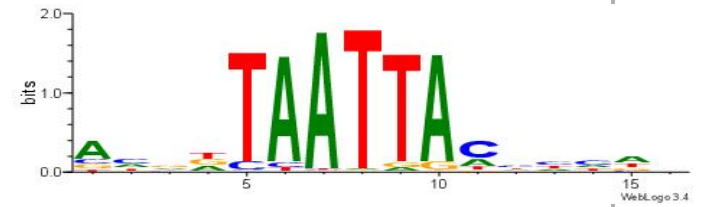
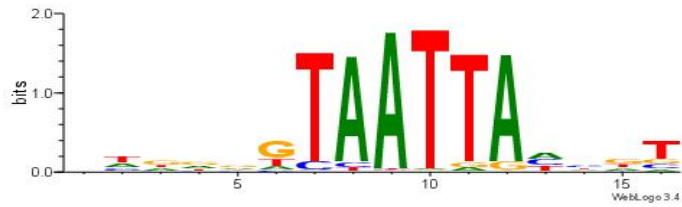
--DHTATTTACBD---

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---

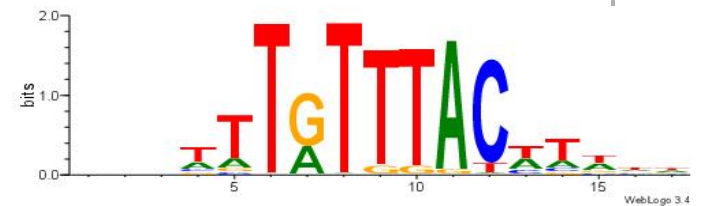
Original motif

Consensus sequence: HHWAWGTAAAYAAAVDB



Reverse complement motif

Consensus sequence: BDVTTTKTTTACWTWHH



Motif ID: [UP00039](#)

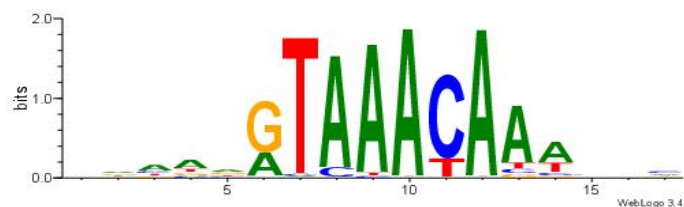
Motif name: Foxj3_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 4
Number of overlap: 11
Similarity score: 0.00490457

Alignment:

HDHADGTAAACAAVVH
---DBGTAAATAHD---

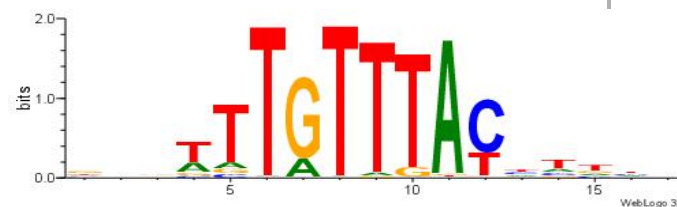
Original motif

Consensus sequence: HDHADGTAAACAAVVH



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

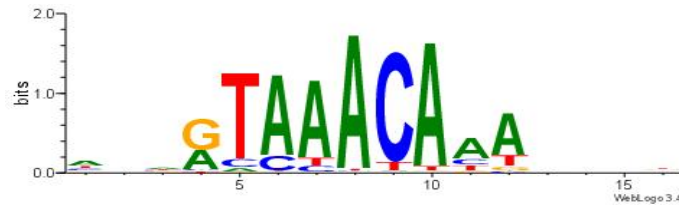
Similarity score: 0.00656547

Alignment:

HDHRTAAACAAHDDD
-DBGTAAATAHD----

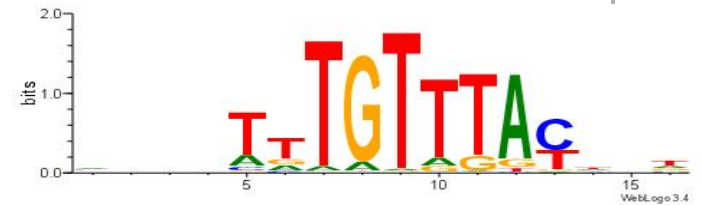
Original motif

Consensus sequence: HDHRTAAACAAHDDD



Reverse complement motif

Consensus sequence: DDDHTTTGTTTAMHDDH



Motif ID: [UP00182](#)
Motif name: Hoxa6
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: 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 06-24-2023 14:40:07

Runtime: 345.945 seconds

MOTIFSIM is written by Ngoc Tam L. Tran

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