

# **MOTIFSIM - MOTIF SIMilarity Detection Tool**

#### Version 2.2

#### **INPUT**

#### **Input Parameters**

Number of files:2Number of top significant motifs:10Number of best matches:5Similarity 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

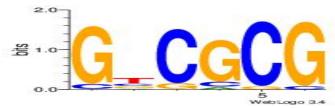
File nameCount of motifsDataset numberW-ChIPMotifs\_DM230.txt111RSAT\_peak-motifs\_DM230.txt102

#### **RESULTS**

### **Top 10 Significant Motifs - Global Matching (Highest to Lowest)**

Dataset #: 1 Motif ID: 1 Motif name: TFW1

Original motif Consensus sequence: GTCGCG



Reverse complement motif Consensus

Consensus sequence: CGCGAC



### **Best Matches for Top Significant Motif ID 1 (Highest to Lowest)**

Dataset #: 2

Motif ID: 18

Motif name: sSGTCACGTGACSs

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Forward

Position number: 3
Number of overlap: 6

Similarity score: 0.0375102

Alignment:

SGGTCACGTGACCS
--GTCGCG----



Reverse complement motif

Consensus sequence: SGGTCACGTGACC



Motif ID: 12

Motif name: csGCCCGCCCcsc

Matching format of first motif: Original Motif
Matching format of second motif: Original Motif

Direction: Backward

Position number: 7

Number of overlap: 6

Similarity score: 0.0539

Alignment:

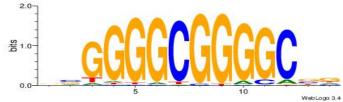
HVGCCCGCCCCBB
--GTCGCG-----

Original motif Consensus sequence: HVGCCCCGCCCBB



Reverse complement motif Co

Consensus sequence: BBGGGGCGGGCC



Dataset #: 2

Motif ID: 14

Motif name: cccGCCCCGCCCsb

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

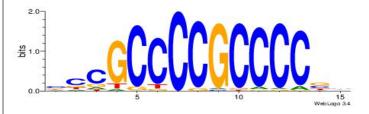
Direction: Backward

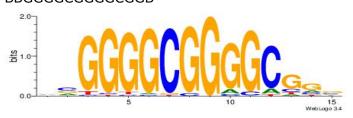
Position number: 3
Number of overlap: 6

Similarity score: 0.0558733

Alignment:

BCCGCCCGCCCCBB
----CGCGAC--





Dataset #: 2

Motif ID: 16

Motif name: kcACCTGCAgc

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Forward

Position number: 6
Number of overlap: 6

Similarity score: 0.0980422

Alignment:

BCACCTGCABC ----CGCGAC

Original motif Consensus sequence: BCACCTGCABC

Reverse complement motif

Consensus sequence: GBTGCAGGTGB





Motif ID: 20

Motif name: dhACATTCTkh

Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Forward

Position number: 8

Number of overlap: 4

Similarity score: 1.09467

Alignment:

HCAGAATGTHD--

----GTCGCG

Original motif Consensus sequence: DHACATTCTGH



E 1.0 CACAATTI 10 10 Webtogo 3.

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

Original motif Consensus sequence: DBGTAAATAHD





## **Best Matches for Top Significant Motif ID 21 (Highest to Lowest)**

Dataset #: 1

Motif ID: 11

Motif name: TFM11

Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement

Direction: Forward

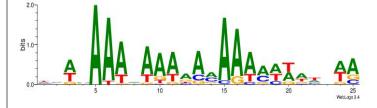
Position number: 15
Number of overlap: 11

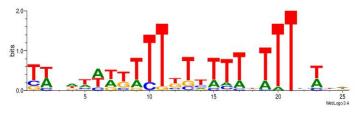
Similarity score: 0.0192768

Alignment:

TWVHWWWYTTTYTTTTTHTTTVWBH
-----DHTATTTACBD

Original motif Consensus sequence: HDWVAAAHAAAAAMAAAMWWWHBWA





Motif ID: 7

Motif name: TFM1

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

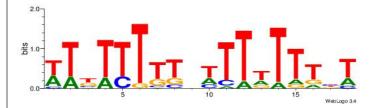
Direction: Forward

Position number: 1
Number of overlap: 11

Similarity score: 0.0283217

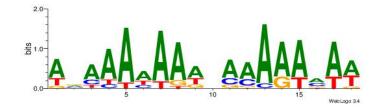
Alignment:

WTKTTTTTHWTTTTTTBT DHTATTTACBD-----



Reverse complement motif
ABAAAAAAWHAAAAARAW

Consensus sequence:



Dataset #: 1

Motif ID: 8

Motif name: TFM3

Matching format of first motif: Reverse Complement

Matching format of second motif:

Original Motif

Direction:

Backward

Position number: 2

Number of overlap: 11

Similarity score: 0.0308097

Alignment:

WWHTTTTTCABAAWTTWA
-----DHTATTTACBD-

Original motif Consensus sequence: WWHTTTTTCABAAWTTWA





Dataset #: 1

Motif ID: 10

Motif name: TFM13

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Backward

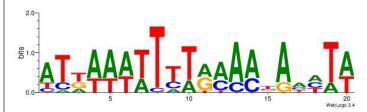
Position number: 3
Number of overlap: 11

Similarity score: 0.0333874

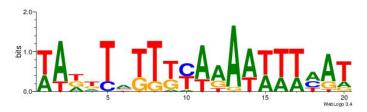
Alignment:

ATKAAWTTTTRMAABAHHTW -----DBGTAAATAHD--

Consensus sequence: ATKAAWTTTTRMAABAHHTW Original motif



Reverse complement motif WAHHTVTTYKAAAAWTTRAT Consensus sequence:



Dataset #: 1

9 Motif ID:

Motif name: TFM12

Matching format of first motif: **Reverse Complement** Matching format of second motif: **Reverse Complement** 

Direction: Backward

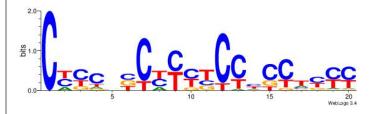
Position number: 14 Number of overlap: 7

2.0544 Similarity score:

Alignment:

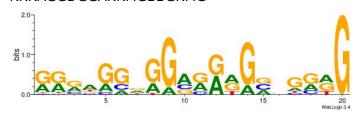
----KKKAGGDGGAKKMGBBGKMG DHTATTTACBD-----

Original motif Consensus sequence: CYYCBBCYYYTCCHCCTYYY



Reverse complement motif KKKAGGDGGAKKMGBBGKMG

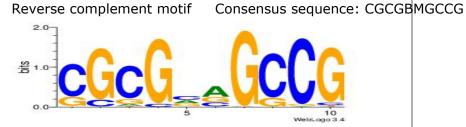
Consensus sequence:



### Dataset #: 1 Motif ID: 3 Motif name: TFW3

Original motif Consensus sequence: CGGCYBCGCG





### **Best Matches for Top Significant Motif ID 3 (Highest to Lowest)**

Dataset #: 2

Motif ID: 12

Motif name: csGCCCGCCCcsc

Matching format of first motif: Original Motif

Matching format of second motif: Original Motif

Direction: Backward

Position number: 5

Number of overlap: 10

Similarity score: 0.0718771

### Alignment:

HVGCCCCGCCCBB CGGCYBCGCG----

Original motif Consensus sequence: HVGCCCCGCCCCBB



Reverse complement motif Consens

Consensus sequence: BBGGGGCGGGCC



Motif ID: 14

Motif name: cccGCCCCGCCCSb

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

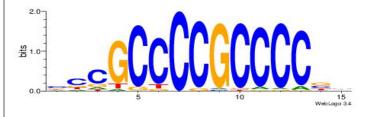
Direction: Backward

Position number: 5
Number of overlap: 10

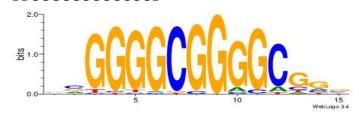
Similarity score: 0.0719604

Alignment:

BCCGCCCGCCCBB
-CGGCYBCGCG----



Reverse complement motif Consensus sequence: BBGGGGCGGGGCGGB



Dataset #: 2

Motif ID: 18

Motif name: sSGTCACGTGACSs

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: 0.0895189

Alignment:

SGGTCACGTGACCS
----CGCGBMGCCG



Reverse complement motif Consensus sequence: SGGTCACGTGACC



Dataset #: 2

Motif ID: 16

Motif name: kcACCTGCAgc

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Forward

Position number: 4

Number of overlap:

Similarity score: 1.10343

Alignment:

BCACCTGCABC----CGCGBMGCCG

Original motif Consensus sequence: BCACCTGCABC

Reverse complement motif

Consensus sequence: GBTGCAGGTGB





Motif ID: 15

Motif name: kCAGCCAATmr

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Backward

Position number: 5

Number of overlap: 7

Similarity score: 1.57732

#### Alignment:

---DCAGCCAATVR CGCGBMGCCG----

Original motif Consensus sequence: DCAGCCAATVR



Reverse complement motif

Consensus sequence: MBATTGGCTGH



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

Original motif Consensus

Consensus sequence: HVGCCCCGCCCBB

Reverse complement motif

Consensus sequence: BBGGGGCGGGCC



## **Best Matches for Top Significant Motif ID 12 (Highest to Lowest)**

Dataset #: 1

Motif ID: 9

Motif name: TFM12

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Backward

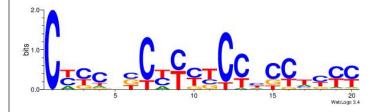
Position number: 4

Number of overlap: 14

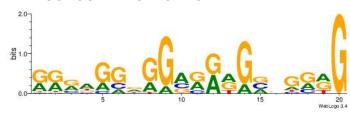
Similarity score: 0.0777991

Alignment:

CYYCBBCYYYTCCHCCTYYY
---HVGCCCCGCCCCBB---



Reverse complement motif Consensus sequence: KKKAGGDGGAKKMGBBGKMG



Motif ID: 6

Motif name: TFM2

Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Backward

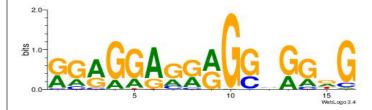
Position number: 3
Number of overlap: 14

Similarity score: 0.0880609

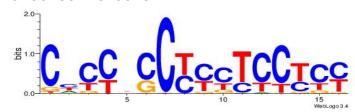
Alignment:

CHCCBCCKMCTCCKCM
HVGCCCCGCCCCBB--

Original motif Consensus sequence: RGRGGAGRRGGHGGDG



Reverse complement motif Consensus sequence: CHCCBCCKMCTCCKCM



Dataset #: 1

Motif ID: 5

Motif name: TFF11

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: 0.0937271

Alignment:

GGMGGRGGCGGVGC BBGGGGCGGGCVD



Reverse complement motif Consensus sequence: GCVCCGCCMCCYC



Dataset #: 1

Motif ID: 4

Motif name: TFF1

Matching format of first motif: Original Motif
Matching format of second motif: Original Motif

Direction: Forward

Position number: 1

Number of overlap: 12

Similarity score: 1.08016

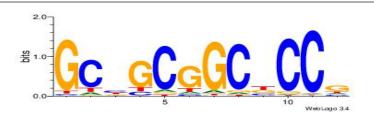
Alignment:

CGGVGCCGCVGC-HVGCCCCGCCCCBB

Reverse complement motif

Consensus sequence: GCVGCGGCBCCG





Motif ID: 3

Motif name: TFW3

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Forward

Position number: 1

Number of overlap: 10

Similarity score: 2.07757

Alignment:

CGGCYBCGCG---HVGCCCCGCCCCBB

Original motif Consensus sequence: CGGCYBCGCG



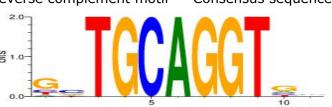
Reverse complement motif Consensus sequence: CGCGBMGCCG



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

Original motif Consensus sequence: BCACCTGCABC





# **Best Matches for Top Significant Motif ID 16 (Highest to Lowest)**

Dataset #: 1

Motif ID: 5

Motif name: TFF11

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Backward

Position number: 4

Number of overlap: 11

Similarity score: 0.0312321

Alignment:

GGMGGRGGCGGVGC GBTGCAGGTGB---



Reverse complement motif

Consensus sequence: GCVCCGCCMCCYC



Motif ID: 9

Motif name: TFM12

Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement

Direction: Backward

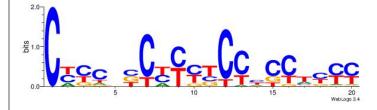
Position number: 6
Number of overlap: 11

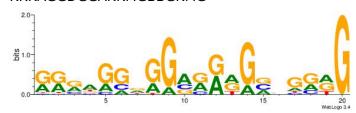
Similarity score: 0.0444938

Alignment:

KKKAGGDGGAKKMGBBGKMG
----GBTGCAGGTGB----

Original motif Consensus sequence: CYYCBBCYYYTCCHCCTYYY





Dataset #: 1

Motif ID:

Motif name: TFM2

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Backward

Position number: 7

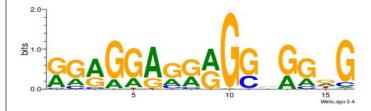
Number of overlap: 10

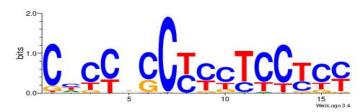
Similarity score: 0.538471

Alignment:

-RGRGGAGRRGGHGGDG GBTGCAGGTGB----

Original motif Consensus sequence: RGRGGAGRRGGHGGDG





Dataset #: 1

Motif ID: 4

Motif name: TFF1

Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Forward

Position number: 5

Number of overlap: 8

Similarity score: 1.54364

Alignment:

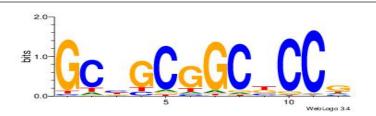
GCVGCGGCBCCG-----BCACCTGCABC

Original motif Consensus sequence: CGGVGCCGCVGC

Reverse complement motif

Consensus sequence: GCVGCGGCBCCG





Motif ID: 3

Motif name: TFW3

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Backward

Position number: 3

Number of overlap: 8

Similarity score: 1.5466

Alignment:

---CGGCYBCGCG

GBTGCAGGTGB--

Original motif Consensus sequence: CGGCYBCGCG





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

Original motif Consensus sequence: HVTACWGTABD





### **Best Matches for Top Significant Motif ID 19 (Highest to Lowest)**

Dataset #: 1

Motif ID: 8

Motif name: TFM3

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Backward

Position number: 5

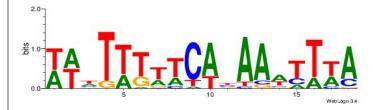
Number of overlap: 11

Similarity score: 0.0413797

Alignment:

WWHTTTTTCABAAWTTWA
---DBTACWGTAVH----

Original motif Consensus sequence: WWHTTTTTCABAAWTTWA



Reverse complement motif TWAAWTTVTGAAAAAHWW

Consensus sequence:



Motif ID: 10

Motif name: TFM13

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: 0.0445707

Alignment:

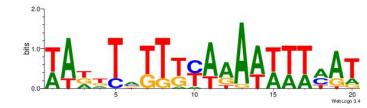
WAHHTVTTYKAAAAWTTRAT
----HVTACWGTABD--

Original motif Consensus sequence: ATKAAWTTTTRMAABAHHTW



Reverse complement motif WAHHTVTTYKAAAAWTTRAT

Consensus sequence:



Dataset #: 1

Motif ID: 11

Motif name: TFM11

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Forward

Position number: 4

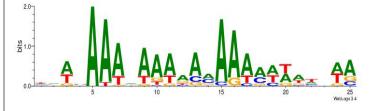
Number of overlap: 11

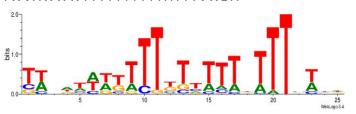
Similarity score: 0.0472742

Alignment:

HDWVAAAHAAAAAMAAAMWWWHBWA
---DBTACWGTAVH-----

Original motif Consensus sequence: HDWVAAAHAAAAAMAAAMWWWHBWA





Dataset #: 1

Motif ID: 7

Motif name: TFM1

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Forward

Position number: 10

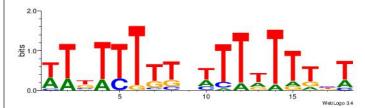
Number of overlap: 9

Similarity score: 1.04742

Alignment:

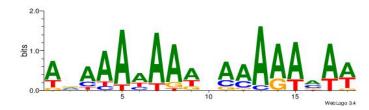
WTKTTTTHWTTTTTTBT------DBTACWGTAVH

Original motif Consensus sequence: WTKTTTTTHWTTTTTBT



Reverse complement motif
ABAAAAAAWHAAAAARAW

Consensus sequence:



Dataset #: 1

Motif ID: 9

Motif name: TFM12

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Backward

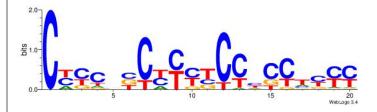
Position number: 15

Number of overlap: 6

Similarity score: 2.54736

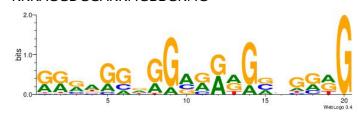
Alignment:

----CYYCBBCYYYTCCHCCTYYY
DBTACWGTAVH-----



Reverse complement motif (KKKAGGDGGAKKMGBBGKMG

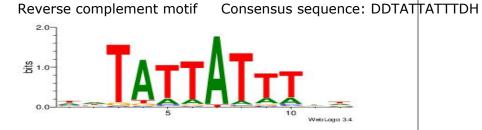
Consensus sequence:



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

Original motif Consensus sequence: HDAAATAATADD





# **Best Matches for Top Significant Motif ID 17 (Highest to Lowest)**

Dataset #: 1

Motif ID: 7

Motif name: TFM1

Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Forward

Position number: 7
Number of overlap: 12

Similarity score: 0.0565705

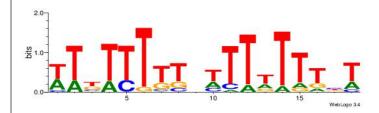
Alignment:

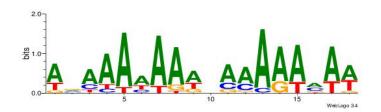
ABAAAAAAWHAAAAARAW
-----HDAAATAATADD

Original motif Consensus sequence: WTKTTTTTHWTTTTTBT

Reverse complement motif ABAAAAAAWHAAAAARAW

Consensus sequence:





Motif ID: 11

Motif name: TFM11

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Forward

Position number: 3

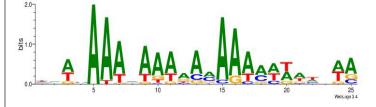
Number of overlap: 12

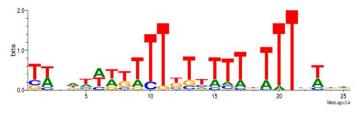
Similarity score: 0.0575935

### Alignment:

HDWVAAAHAAAAAMAAAMWWWHBWA
--HDAAATAATADD-----

Original motif Consensus sequence: HDWVAAAHAAAAAMAAAMWWWHBWA





Dataset #: 1

Motif ID: 10

Motif name: TFM13

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Backward

Position number: 1

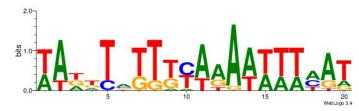
Number of overlap: 12

Similarity score: 0.0712963

Alignment:

ATKAAWTTTTRMAABAHHTW
----DDTATTATTTDH





Dataset #: 1

Motif ID: 8

Motif name: TFM3

Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Backward

Position number: 1

Number of overlap: 12

Similarity score: 0.0733516

Alignment:

TWAAWTTVTGAAAAAHWW
-----HDAAATAATADD

Original motif Consensus sequence: WWHTTTTTCABAAWTTWA





Dataset #: 1

Motif ID: 9

Motif name: TFM12

Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement

Direction: Backward

Position number: 16
Number of overlap: 5

Similarity score: 3.59569

Alignment:

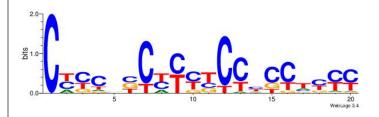
----KKKAGGDGGAKKMGBBGKMG

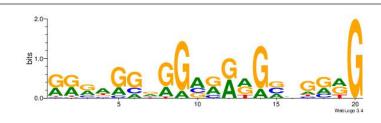
Original motif Consensus sequence: CYYCBBCYYYTCCHCCTYYY

Reverse complement motif

Consensus sequence:

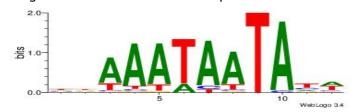
KKKAGGDGGAKKMGBBGKMG

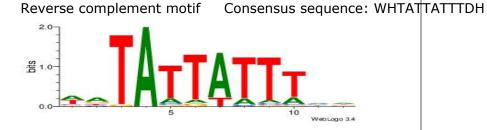




Dataset #: 2 Motif ID: 13 **Motif name: tkAAATAATAtw** 

Original motif Consensus sequence: HDAAATAATAHW





### **Best Matches for Top Significant Motif ID 13 (Highest to Lowest)**

Dataset #: 1

Motif ID: 11

Motif name: TFM11

Matching format of first motif: **Reverse Complement** Matching format of second motif: **Reverse Complement** 

Backward Direction:

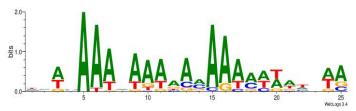
Position number: 3 Number of overlap: 12

Similarity score: 0.0590505

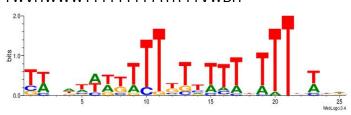
Alignment:

TWVHWWWYTTTYTTTTTHTTTVWBH -----WHTATTATTTDH--

# Original motif Consensus sequence: HDWVAAAHAAAAAMAAAMWWWHBWA



#### 



Dataset #: 1

Motif ID: 7

Motif name: TFM1

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Forward

Position number: 1

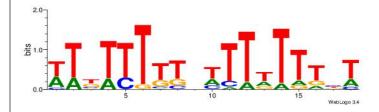
Number of overlap: 12

Similarity score: 0.0637702

#### Alignment:

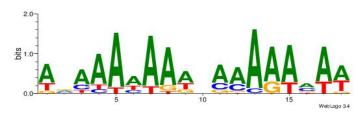
WTKTTTTTHWTTTTTTBT WHTATTATTTDH-----

Original motif Consensus sequence: WTKTTTTTHWTTTTTBT



Reverse complement motif
ABAAAAAAWHAAAAARAW

Consensus sequence:



Motif ID: 10

Motif name: TFM13

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Forward

Position number: 9

Number of overlap: 12

Similarity score: 0.0704475

Alignment:

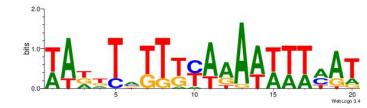
ATKAAWTTTTRMAABAHHTW
-----WHTATTATTTDH

Original motif Consensus sequence: ATKAAWTTTTRMAABAHHTW



Reverse complement motif WAHHTVTTYKAAAAWTTRAT

Consensus sequence:



Dataset #: 1

Motif ID: 8

Motif name: TFM3

Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Backward

Position number: 1

Number of overlap: 12

Similarity score: 0.0763819

Alignment:

TWAAWTTVTGAAAAAHWW
-----HDAAATAATAHW

Original motif Consensus sequence: WWHTTTTTCABAAWTTWA







Dataset #: 1
Motif ID: 9

Motif name: TFM12

Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement

Direction: Backward

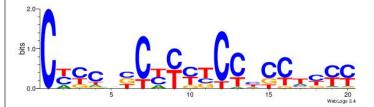
Position number: 16
Number of overlap: 5

Similarity score: 3.59273

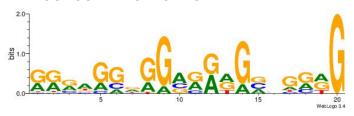
Alignment:

----KKKAGGDGGAKKMGBBGKMG

Original motif Consensus sequence: CYYCBBCYYYTCCHCCTYYY

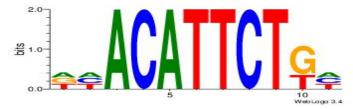


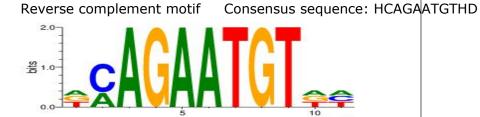
Reverse complement motif Consensus sequence: KKKAGGDGGAKKMGBBGKMG



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

Original motif Consensus sequence: DHACATTCTGH





### **Best Matches for Top Significant Motif ID 20 (Highest to Lowest)**

Dataset #: 1

Motif ID: 8

Motif name: TFM3

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Backward

Position number: 8

Number of overlap: 11

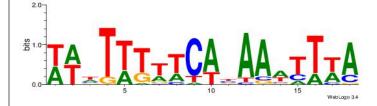
Similarity score: 0.00522383

Alignment:

#### WWHTTTTTCABAAWTTWA

HCAGAATGTHD-----

Original motif Consensus sequence: WWHTTTTTCABAAWTTWA





Dataset #: 1

Motif ID: 11

Motif name: TFM11

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Backward

Position number: 11
Number of overlap: 11

Similarity score: 0.014258

Alignment:

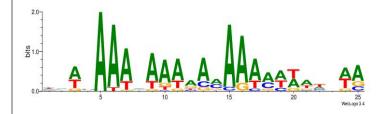
HDWVAAAHAAAAAMAAAMWWWHBWA

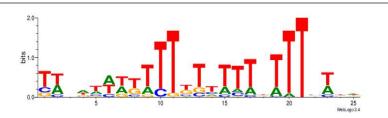
----HCAGAATGTHD-----

Original motif Consensus sequence:

HDWVAAAHAAAAAMAAAMWWWHBWA

TWVHWWWYTTTYTTTTHTTTVWBH





Motif ID: 10

Motif name: TFM13

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Backward

Position number: 9

Number of overlap: 11

Similarity score: 0.0192045

### Alignment:

ATKAAWTTTTRMAABAHHTW -DHACATTCTGH-----





Dataset #: 1

Motif ID: 7

Motif name: TFM1

Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement

Direction: Forward

Position number: 9

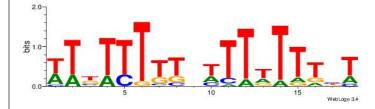
Number of overlap: 10

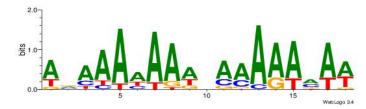
Similarity score: 0.519904

Alignment:

ABAAAAAWHAAAAARAW-----HCAGAATGTHD

Original motif Consensus sequence: WTKTTTTTHWTTTTTBT





Dataset #: 1

Motif ID: 9

Motif name: TFM12

Matching format of first motif:

Matching format of second motif:

Original Motif

Direction:

Backward

Position number: 17
Number of overlap: 4

Similarity score: 3.5

Alignment:

----CYYCBBCYYYTCCHCCTYYY
DHACATTCTGH-----

Original motif Consensus sequence: CYYCBBCYYYTCCHCCTYYY



Reverse complement motif Consensus sequence: KKKAGGDGGAKKMGBBGKMG



Dataset #: 1 Motif ID: 2 Motif name: TFW2

Original motif Consensus sequence: SCGCGCGG





## **Best Matches for Top Significant Motif ID 2 (Highest to Lowest)**

Dataset #: 2
Motif ID: 12

Motif name: csGCCCGCCCCsc

Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Forward

Position number: 2

Number of overlap: 8

Similarity score: 0.0456233

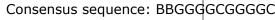
Alignment:

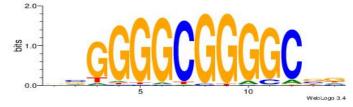
BBGGGGCGGGCVD
-SCGCGCGG----

Original motif Consensus sequence: HVGCCCCGCCCCBB



Reverse complement motif





Dataset #: 2

Motif ID: 14

Motif name: cccGCCCCGCCCSb

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Forward

Position number: 7

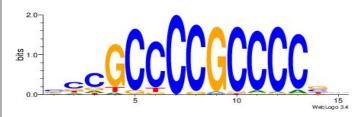
Number of overlap: 8

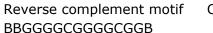
Similarity score: 0.045686

Alignment:

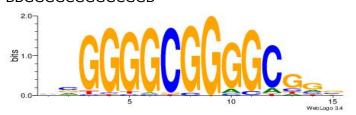
BCCGCCCGCCCCBB

----CCGCGCGS-





Consensus sequence:



Dataset #: 2

Motif ID: 18

Motif name: sSGTCACGTGACSs

Matching format of first motif: Original Motif

Matching format of second motif: Original Motif

Direction: Backward

Position number:

Number of overlap: 8

Similarity score: 0.0988223

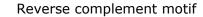
Alignment:

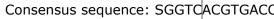
SGGTCACGTGACCS

---SCGCGCGG---

Original motif Consensus sequence: SGGTCACGTGACCS









Motif ID: 16

Motif name: kcACCTGCAgc
Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Backward

Position number: 8
Number of overlap: 4

Similarity score: 2.08456

Alignment:

----GBTGCAGGTGB SCGCGCGG-----

Original motif Consensus sequence: BCACCTGCABC





Dataset #: 2

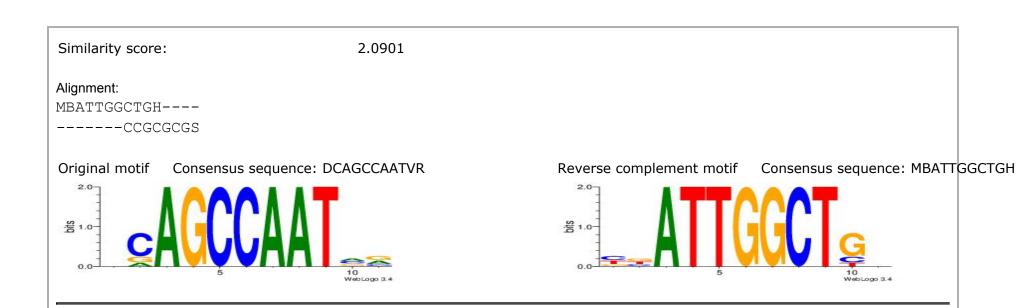
Motif ID: 15

Motif name: kCAGCCAATmr

Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement

Direction: Forward

Position number: 8
Number of overlap: 4









## **Best Matches for Significant Motif ID 20 (Highest to Lowest)**

**Significant Motifs - Global and Local Matching (Highest to Lowest)** 

Dataset #: 1

Motif ID: 8

Motif name: TFM3

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Backward

Position number: 8

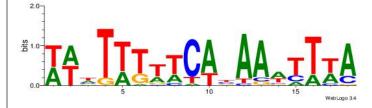
Number of overlap: 11

Similarity score: 0.00522383

Alignment:

WWHTTTTTCABAAWTTWA HCAGAATGTHD-----

Original motif Consensus sequence: WWHTTTTTCABAAWTTWA





Dataset #: 2
Motif ID: 16

Motif name: kcACCTGCAgc
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward

Position number: 1
Number of overlap: 11

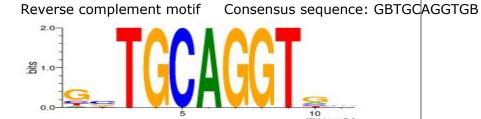
Similarity score: 0.00731643

Alignment:

BCACCTGCABC DHACATTCTGH

Original motif Consensus sequence: BCACCTGCABC





Dataset #: 2

Motif ID: 17

Motif name: wwAAATAATAtw

Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement

Direction: Forward

Position number: 2

Number of overlap: 11

Similarity score: 0.0127231

Alignment:

DDTATTATTTDH
-HCAGAATGTHD

Original motif Consensus sequence: HDAAATAATADD

Reverse complement motif

Consensus sequence: DDTATTATTTDH





Motif ID: 11

Motif name: TFM11

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Forward

Position number: 5

Number of overlap: 11

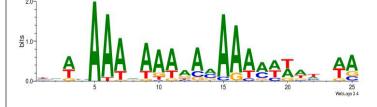
Similarity score: 0.014258

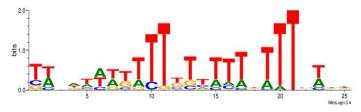
Alignment:

HDWVAAAHAAAAAMAAAMWWWHBWA

----HCAGAATGTHD-----

Original motif Consensus sequence: HDWVAAAHAAAAAMAAAMWWWHBWA





Dataset #: 1

Motif ID: 10

Motif name: TFM13

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Backward

Position number: 9

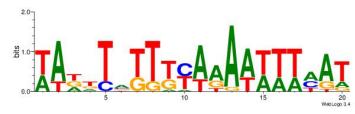
Number of overlap: 11

Similarity score: 0.0192045

Alignment:

ATKAAWTTTTRMAABAHHTW -DHACATTCTGH-----





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

Original motif Consensus sequence: DBGTAAATAHD





## **Best Matches for Significant Motif ID 21 (Highest to Lowest)**

Dataset #: 2
Motif ID: 13

Motif name: tkAAATAATAtw
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward

Position number: 1
Number of overlap: 11

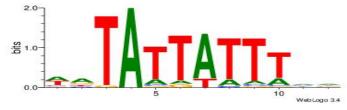
Similarity score: 0.0162338

Alignment:

HDAAATAATAHW -DBGTAAATAHD

Original motif Consensus sequence: HDAAATAATAHW





Dataset #: 2
Motif ID: 17

Motif name: wwAAATAATAtw

Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement

Direction: Backward

Position number: 2

Number of overlap: 11

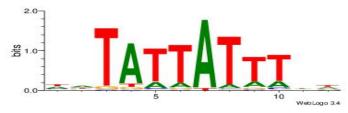
Similarity score: 0.0164863

Alignment:

DDTATTATTTDH
DHTATTTACBD-

Original motif Consensus sequence: HDAAATAATADD





Dataset #: 1

Motif ID: 11

Motif name: TFM11

Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement

Direction: Forward

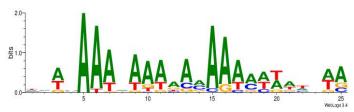
Position number: 15
Number of overlap: 11

Similarity score: 0.0192768

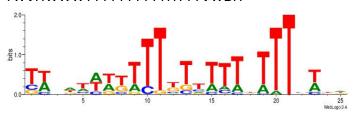
Alignment:

TWVHWWWYTTTYTTTTTTTTTTVWBH
-----DHTATTTACBD

# Original motif Consensus sequence: HDWVAAAHAAAAAMAAAMWWWHBWA



#### 



Dataset #: 1

Motif ID: 7

Motif name: TFM1

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Forward

Position number: 1

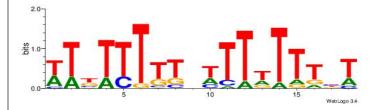
Number of overlap: 11

Similarity score: 0.0283217

#### Alignment:

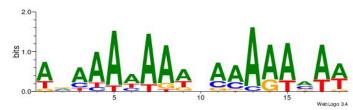
WTKTTTTTHWTTTTTTBT DHTATTTACBD-----

Original motif Consensus sequence: WTKTTTTTHWTTTTTBT



Reverse complement motif Co

Consensus sequence:



Motif ID: 8

Motif name: TFM3

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Backward

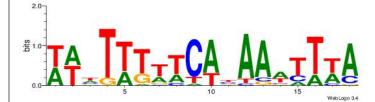
Position number: 2
Number of overlap: 11

Similarity score: 0.0308097

Alignment:

WWHTTTTTCABAAWTTWA
-----DHTATTTACBD-

Original motif Consensus sequence: WWHTTTTTCABAAWTTWA



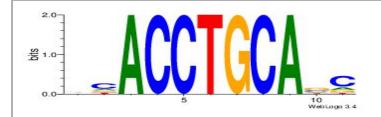
Reverse complement motif TWAAWTTVTGAAAAAHWW

Consensus sequence:



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

Original motif Consensus sequence: BCACCTGCABC Reverse complement motif Consensus sequence: GBTGCAGGTGB





## **Best Matches for Significant Motif ID 16 (Highest to Lowest)**

Dataset #: 2

Motif ID: 19

Motif name: wsTACwGTAsw

Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Backward

Position number: 1

Number of overlap: 11

Similarity score: 0.0182895

Alignment:

DBTACWGTAVH BCACCTGCABC

Original motif Consensus sequence: HVTACWGTABD





Dataset #: 2

Motif ID: 20

Motif name: dhACATTCTkh
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif

Direction: Backward

Position number: 1
Number of overlap: 11

Similarity score: 0.0221745

#### Alignment:

DHACATTCTGH BCACCTGCABC

Original motif Consensus sequence: DHACATTCTGH



Reverse complement motif Co

Consensus sequence: HCAGAATGTHD



Dataset #: 2

Motif ID: 18

Motif name: sSGTCACGTGACSs

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Forward

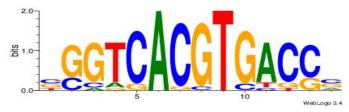
Position number: 4
Number of overlap: 11

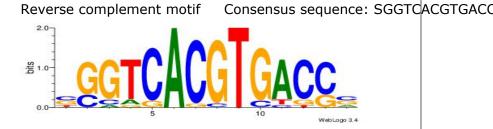
Similarity score: 0.0280991

#### Alignment:

SGGTCACGTGACCS
---BCACCTGCABC

Original motif Consensus sequence: SGGTCACGTGACCS





Dataset #: 1

Motif ID: 5

Motif name: TFF11

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Backward

Position number: 4

Number of overlap: 11

Similarity score: 0.0312321

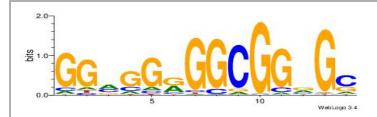
Alignment:

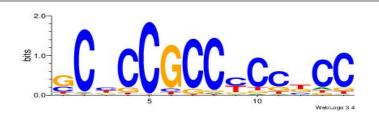
GGMGGRGGCGGVGC GBTGCAGGTGB---

Original motif Consensus sequence: GGMGGRGGCGGVGC

Reverse complement motif

Consensus sequence: GCVCC GCCMCCYC





Motif ID: 12

Motif name: csGCCCGCCCcsc

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Forward

Position number: 2

Number of overlap: 11

Similarity score: 0.0370129

Alignment:

HVGCCCCGCCCBB
-BCACCTGCABC--

Original motif (

Consensus sequence: HVGCCCCGCCCBB



Reverse complement motif

Consensus sequence: BBGGGGCGGGGC



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

Original motif Consensus sequence: HVTACWGTABD





## **Best Matches for Significant Motif ID 19 (Highest to Lowest)**

Dataset #: 2
Motif ID: 16

Motif name: kcACCTGCAgc Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Backward

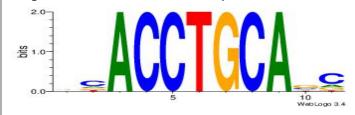
Position number: 1
Number of overlap: 11

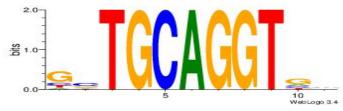
Similarity score: 0.0199592

Alignment:

GBTGCAGGTGB HVTACWGTABD

Original motif Consensus sequence: BCACCTGCABC





Motif ID: 17

Motif name: wwwAAATAATAtw
Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Backward

Position number: 1
Number of overlap: 11

Similarity score: 0.0309343

Alignment:

DDTATTATTTDH
-HVTACWGTABD

Original motif Consensus sequence: HDAAATAATADD





Dataset #: 2

Motif ID: 13

Motif name: tkAAATAATAtw

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Forward

Position number: 1

Number of overlap: 11

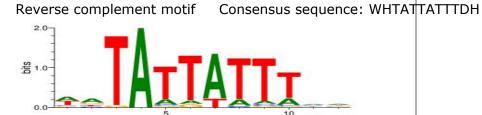
Similarity score: 0.0337121

Alignment:

HDAAATAATAHW DBTACWGTAVH-

Original motif Consensus sequence: HDAAATAATAHW





Dataset #: 2

Motif ID: 21

Motif name: wbgTAAATAww

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Backward

Position number: 1

Number of overlap: 11

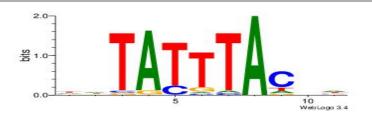
Similarity score: 0.037518

Alignment:

DBGTAAATAHD DBTACWGTAVH

Original motif Consensus sequence: DBGTAAATAHD Reverse complement motif Consensus sequence: DHTATITACBD





Motif ID: 8

Motif name: TFM3

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Backward

Position number: 5

Number of overlap: 11

Similarity score: 0.0413797

Alignment:

WWHTTTTTCABAAWTTWA

---DBTACWGTAVH----



Reverse complement motif Cor TWAAWTTVTGAAAAAHWW

Consensus sequence:



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

Original motif Consensus sequence: DCAGCCAATVR





## **Best Matches for Significant Motif ID 15 (Highest to Lowest)**

Dataset #: 2

Motif ID: 13

Motif name: tkAAATAATAtw

Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement

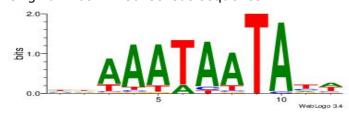
Direction: Forward

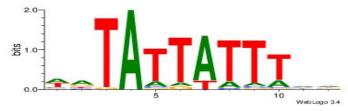
Position number: 2
Number of overlap: 11

Similarity score: 0.0320614

Alignment:

WHTATTATTTDH
-MBATTGGCTGH





Motif ID: 20

Motif name: dhACATTCTkh
Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Backward

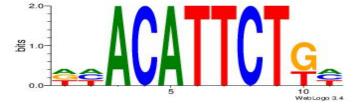
Position number: 1
Number of overlap: 11

Similarity score: 0.034958

Alignment:

HCAGAATGTHD DCAGCCAATVR

Original motif Consensus sequence: DHACATTCTGH





Dataset #: 2

Motif ID: 17

Motif name: wwAAATAATAtw

Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement

Direction: Forward

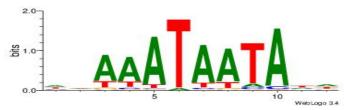
Position number: 2
Number of overlap: 11

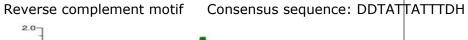
Similarity score: 0.0358988

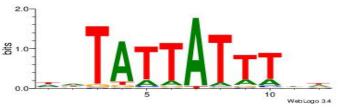
Alignment:

DDTATTATTTDH
-MBATTGGCTGH

Original motif Consensus sequence: HDAAATAATADD







Dataset #: 2

Motif ID: 16

Motif name: kcACCTGCAgc

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Backward

Position number: 1

Number of overlap: 11

Similarity score: 0.0360892

Alignment:

BCACCTGCABC MBATTGGCTGH

Original motif Consensus sequence: BCACCTGCABC

Reverse complement motif

Consensus sequence: GBTGCAGGTGB





Motif ID: 5

Motif name: TFF11

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Backward

Position number: 2

Number of overlap: 11

Similarity score: 0.0376063

Alignment:

GGMGGRGGCGGVGC

--MBATTGGCTGH-



Reverse complement motif

Consensus sequence: GCVCC GCCMCCYC



Dataset #: 1 Motif ID: 4 Motif name: TFF1

Original motif Consensus sequence: CGGVGCCGCVGC



Reverse complement motif

Consensus sequence: GCVGCGGCBCCG



## **Best Matches for Significant Motif ID 4 (Highest to Lowest)**

Dataset #: 1

Motif ID: 5

Motif name: TFF11

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Backward

Position number: 1
Number of overlap: 12

Similarity score: 0.0292081

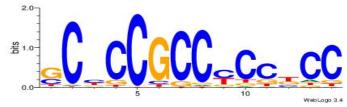
Alignment:

GGMGGRGGCGGVGC
--CGGVGCCGCVGC



Reverse complement motif

Consensus sequence: GCVCCGCCMCCYC



Motif ID: 12

Motif name: csGCCCGCCCcsc

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Forward

Position number: 1
Number of overlap: 12

Similarity score: 0.0542674

Alignment:

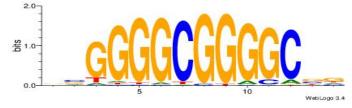
HVGCCCGCCCCBB CGGVGCCGCVGC--

Original motif Consensus sequence: HVGCCCCGCCCBB



Reverse complement motif Con

Consensus sequence: BBGGGGCGGGGC



Dataset #: 1

Motif ID: 9

Motif name: TFM12

Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Forward

Position number: 7
Number of overlap: 12

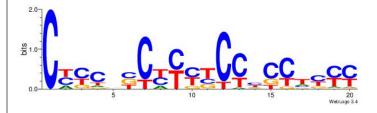
Similarity score: 0.0543272

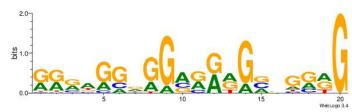
Alignment:

 ${\tt KKKAGGDGGAKKMGBBGKMG}$ 

----CGGVGCCGCVGC--

Original motif Consensus sequence: CYYCBBCYYYTCCHCCTYYY





Dataset #: 2

Motif ID: 14

Motif name: cccGCCCCGCCCsb

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Forward

Position number: 4
Number of overlap: 12

Similarity score: 0.0548371

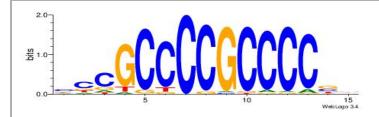
Alignment:

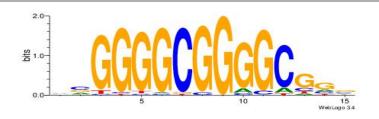
BCCGCCCGCCCCBB
---GCVGCGGCBCCG

 Reverse complement motif

Consensus sequence:

BBGGGGGGGGGB





Motif ID: 6

Motif name: TFM2

Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement

Direction: Backward

Position number: 3

Number of overlap: 12

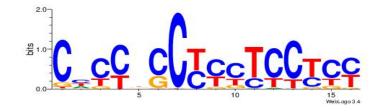
Similarity score: 0.0594165

Alignment:

CHCCBCCKMCTCCKCM
--GCVGCGGCBCCG--



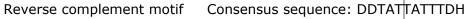
Reverse complement motif Consensus sequence: CHCCBCCKMCTCCKCM

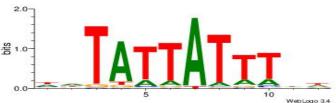


Dataset #: 2 Motif ID: 17 Motif name: wwAAATAATAtw

Original motif Consensus sequence: HDAAATAATADD







## **Best Matches for Significant Motif ID 17 (Highest to Lowest)**

Dataset #: 2

Motif ID: 13

Motif name: tkAAATAATAtw

Matching format of first motif: Original Motif

Matching format of second motif: Original Motif

Direction: Forward

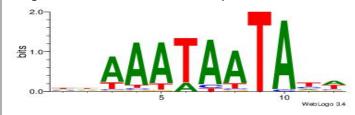
Position number: 1
Number of overlap: 12

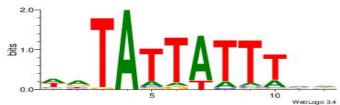
Similarity score: 0

#### Alignment:

HDAAATAATAHW HDAAATAATADD

Original motif Consensus sequence: HDAAATAATAHW





Motif ID: 7

Motif name: TFM1

Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Forward

Position number: 7

Number of overlap: 12

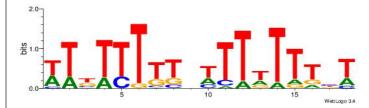
Similarity score: 0.0565705

Alignment:

ABAAAAAWHAAAAARAW

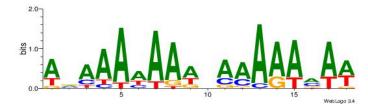
----HDAAATAATADD

Original motif Consensus sequence: WTKTTTTTHWTTTTTBT



Reverse complement motif
ABAAAAAAWHAAAAARAW

Consensus sequence:



Dataset #: 1

Motif ID: 11

Motif name: TFM11

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Forward

Position number: 3

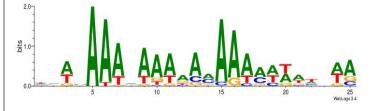
Number of overlap: 12

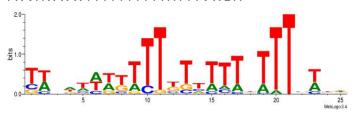
Similarity score: 0.0575935

### Alignment:

HDWVAAAHAAAAAMAAAMWWWHBWA
--HDAAATAATADD-----

Original motif Consensus sequence: HDWVAAAHAAAAAMAAAMWWWHBWA





Dataset #: 1

Motif ID: 10

Motif name: TFM13

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Backward

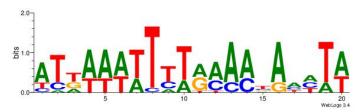
Position number: 1

Number of overlap: 12

Similarity score: 0.0712963

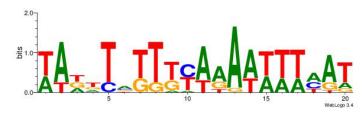
Alignment:

ATKAAWTTTTRMAABAHHTW -----DDTATTATTTDH



Reverse complement motif WAHHTVTTYKAAAAWTTRAT

Consensus sequence:



Dataset #: 1

Motif ID: 8

Motif name: TFM3

Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Backward

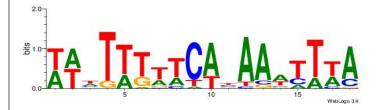
Position number: 1

Number of overlap: 12

Similarity score: 0.0733516

Alignment:

TWAAWTTVTGAAAAAHWW
-----HDAAATAATADD



Reverse complement motif TWAAWTTVTGAAAAAHWW

Consensus sequence:



Dataset #: 1 Motif ID: 1 Motif name: TFW1

Original motif Consensus sequence: GTCGCG





## **Best Matches for Significant Motif ID 1 (Highest to Lowest)**

Dataset #: 1

Motif ID: 3

Motif name: TFW3

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Backward

Position number: 1
Number of overlap: 6

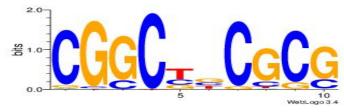
Similarity score: 0.0350356

Alignment:

CGGCYBCGCG

----GTCGCG

Original motif Consensus sequence: CGGCYBCGCG



Reverse complement motif Consensus sequence: CGCGBMGCCG



Motif ID: 18

Motif name: sSGTCACGTGACSs

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Forward

Position number: 3

Number of overlap: 6

Similarity score: 0.0375102

Alignment:

SGGTCACGTGACCS
--GTCGCG----



Reverse complement motif Con

Consensus sequence: SGGTCACGTGACC



Dataset #: 1

Motif ID: 5

Motif name: TFF11

Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement

Direction: Forward

Position number: 5

Number of overlap: 6

Similarity score: 0.0381641

Alignment:

GCVCCGCCMCCYCC

----CGCGAC----





Dataset #: 1

Motif ID: 4

Motif name: TFF1

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Backward

Position number: 1

Number of overlap: 6

Similarity score: 0.0431161

Alignment:

CGGVGCCGCVGC

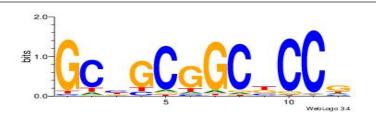
----CGCGAC

Original motif Consensus sequence: CGGVGCCGCVGC

Reverse complement motif

Consensus sequence: GCVGCGGCBCCG





Motif ID: 2

Motif name: TFW2

Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement

Direction: Forward

Position number: 2

Number of overlap: 6

Similarity score: 0.052047

Alignment:

CCGCGCGS

-CGCGAC-

Original motif Consensus sequence: SCGCGCGG





Dataset #: 2

Motif ID: 12

Motif name: csGCCCCGCCCcsc

Matching format of first motif: Original Motif

Matching format of second motif: Original Motif

Direction: Backward

Position number: 7

Number of overlap: 6

Similarity score: 0.0539

#### Alignment:

HVGCCCCGCCCBB
--GTCGCG----

Original motif Consensus sequence: HVGCCCCGCCCCBB



Reverse complement motif

Consensus sequence: BBGGGGCGGGCC



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

Original motif Consensus sequence: HDAAATAATAHW



Reverse complement motif

Consensus sequence: WHTATTATTTDH



**Best Matches for Significant Motif ID 13 (Highest to Lowest)** 

Motif ID: 17

Motif name: wwwAAATAATAtw
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif

Direction: Forward

Position number: 1
Number of overlap: 12
Similarity score: 0

Alignment:

HDAAATAATADD HDAAATAATAHW

Original motif Consensus sequence: HDAAATAATADD





Dataset #:

Motif ID: 11

Motif name: TFM11

Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement

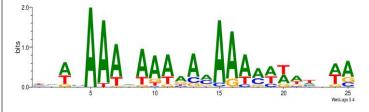
Direction: Forward

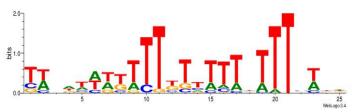
Position number: 12 Number of overlap: 12 Similarity score: 0.0590505

#### Alignment:

TWVHWWWYTTTYTTTTTTTTTTVWBH
-----WHTATTATTTDH--

Original motif Consensus sequence: HDWVAAAHAAAAAMAAAMWWWHBWA





Dataset #: 1

Motif ID: 7

Motif name: TFM1

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: 0.0637702

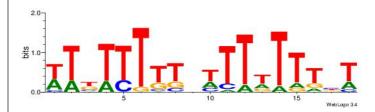
Alignment:

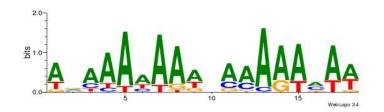
WTKTTTTTHWTTTTTTBT WHTATTATTTDH-----

Original motif Consensus sequence: WTKTTTTTHWTTTTTBT

Reverse complement motif
ABAAAAAAWHAAAAARAW

Consensus sequence:





Motif ID: 10

Motif name: TFM13

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Forward

Position number: 9

Number of overlap: 12

Similarity score: 0.0704475

Alignment:

ATKAAWTTTTRMAABAHHTW
-----WHTATTATTTDH



AATTT AT

Dataset #: 1

Motif ID: 8

Motif name: TFM3

Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Backward

Position number: 1

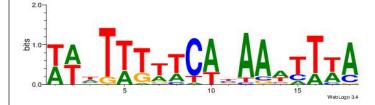
Number of overlap: 12

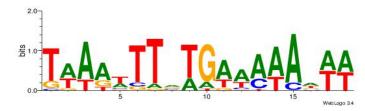
Similarity score: 0.0763819

Alignment:

TWAAWTTVTGAAAAAHWW
-----HDAAATAATAHW

Original motif Consensus sequence: WWHTTTTTCABAAWTTWA





Dataset #: 1 Motif ID: 2 Motif name: TFW2

Original motif Consensus sequence: SCGCGCGG





## **Best Matches for Significant Motif ID 2 (Highest to Lowest)**

Dataset #: 2
Motif ID: 12

Motif name: csGCCCGCCCsc Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Forward

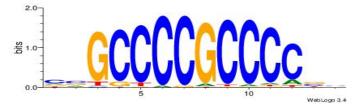
Position number: 2
Number of overlap: 8

Similarity score: 0.0456233

Alignment:

BBGGGGCGGGCVD
-SCGCGCGG----

Original motif Consensus sequence: HVGCCCCGCCCBB



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Dataset #: 2
Motif ID: 14

Motif name: cccGCCCCGCCCsb

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Forward

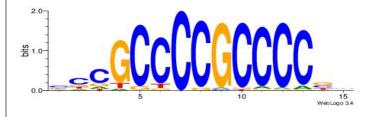
Position number: 7

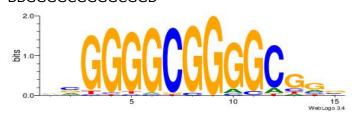
Number of overlap:

Similarity score: 0.045686

Alignment:

BCCGCCCGCCCCBB
----CCGCGCGS-





Dataset #: 1

Motif ID: 5

Motif name: TFF11

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Forward

Position number: 4

Number of overlap:

Similarity score: 0.0583967

Alignment:

GGMGGRGGCGGVGC

---SCGCGCGG---

Original motif Consensus sequence: GGMGGRGGCGGVGC



Reverse complement motif Consensus sequence: GCVCCGCCMCCYC



Dataset #: 1

Motif ID: 4

Motif name: TFF1

Matching format of first motif: Original Motif

Matching format of second motif: Original Motif

Direction: Backward

Position number: 5

Number of overlap: 8

Similarity score: 0.060966

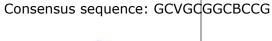
Alignment:

CGGVGCCGCVGC SCGCGCGG----

Original motif Consensus sequence: CGGVGCCGCVGC



Reverse complement motif C





Motif ID: 3

Motif name: TFW3

Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Forward

Position number: 3

Number of overlap:

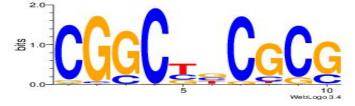
Similarity score: 0.0906073

Alignment:

CGCGBMGCCG

--SCGCGCGG

Original motif Consensus sequence: CGGCYBCGCG



Reverse complement motif Consensus sequence: CGCGBMGCCG



# **Best Matches for Each Motif (Highest to Lowest)**

Dataset #: 1 Motif ID: 1 Motif name: TFW1

Original motif Consensus sequence: GTCGCG Reverse complement motif Consensus sequence: CGCGAC

# G\_CGCG



# **Best Matches for Motif ID 1 (Highest to Lowest)**

Dataset #: 1

Motif ID: 3

Motif name: TFW3

Matching format of first motif: Original Motif

Matching format of second motif: Original Motif

Direction: Backward

Position number: 1

Number of overlap: 6

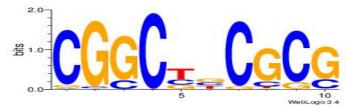
Similarity score: 0.0350356

#### Alignment:

CGGCYBCGCG

----GTCGCG

Original motif Consensus sequence: CGGCYBCGCG



Reverse complement motif Consensus sequence: CGCGBMGCCG



Dataset #: 2

Motif ID: 18

Motif name: sSGTCACGTGACSs

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Forward

Position number: 3
Number of overlap: 6

Similarity score: 0.0375102

Alignment:

SGGTCACGTGACCS
--GTCGCG----

Original motif Consensus sequence: SGGTCACGTGACCS



Reverse complement motif Conse

Consensus sequence: SGGTCACGTGACC



Dataset #: 1

Motif ID: 5

Motif name: TFF11

Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement

Direction: Forward

Position number: 5

Number of overlap:

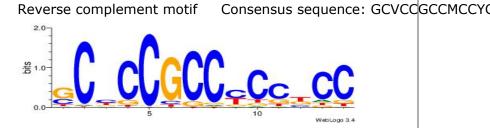
Similarity score: 0.0381641

#### Alignment:

GCVCCGCCMCCYCC
----CGCGAC----

Original motif Consensus sequence: GGMGGRGGCGGVGC





Dataset #: 1

Motif ID: 4

Motif name: TFF1

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Backward

Position number: 1

Number of overlap: 6

Similarity score: 0.0431161

Alignment:

CGGVGCCGCVGC
----CGCGAC

 Reverse complement motif

Consensus sequence: GCVGCGGCBCCG





Motif ID: 2

Motif name: TFW2

Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement

Direction: Forward

Position number: 2

Number of overlap:

Similarity score: 0.052047

Alignment:

CCGCGCGS

-CGCGAC-

Original motif Consensus sequence: SCGCGCGG





Dataset #: 2

Motif ID: 12

Motif name: csGCCCCGCCCcsc

Matching format of first motif: Original Motif

Matching format of second motif:

Original Motif

Direction:

Backward

Position number: 7

Number of overlap: 6

Similarity score: 0.0539

#### Alignment:

HVGCCCCGCCCBB
--GTCGCG----

Original motif Consensus sequence: HVGCCCCGCCCCBB



Reverse complement motif

Consensus sequence: BBGGGGCGGGCC



Dataset #: 1 Motif ID: 2 Motif name: TFW2

Original motif Consensus sequence: SCGCGCGG



Reverse complement motif

Consensus sequence: CCGCGCGS



**Best Matches for Motif ID 2 (Highest to Lowest)** 

Motif ID: 12

Motif name: csGCCCGCCCcsc

Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Forward

Position number: 2

Number of overlap: 8

Similarity score: 0.0456233

Alignment:

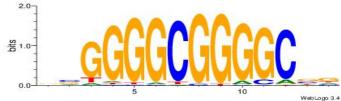
BBGGGGGGGCVD
-SCGCGCGG----

Original motif Consensus sequence: HVGCCCCGCCCBB



Reverse complement motif Consens

Consensus sequence: BBGGGGCGGGGC



Dataset #: 2

Motif ID: 14

Motif name: cccGCCCCGCCCSb

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Forward

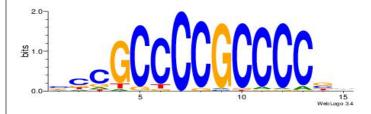
Position number: 7

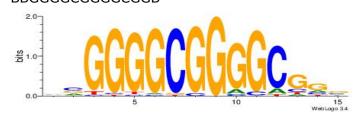
Number of overlap: 8

Similarity score: 0.045686

Alignment:

BCCGCCCGCCCCBB
----CCGCGCGS-





Dataset #: 1

Motif ID: 5

Motif name: TFF11

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Forward

Position number: 4
Number of overlap: 8

Similarity score: 0.0583967

Alignment:

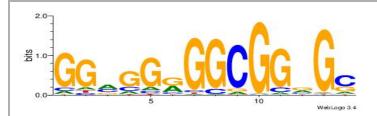
GGMGGRGGCGGVGC

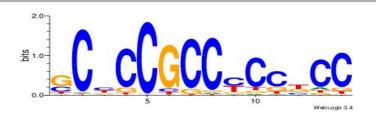
---SCGCGCGG---

Original motif Consensus sequence: GGMGGRGGCGGVGC

Reverse complement motif

Consensus sequence: GCVCCGCCMCCYC





Motif ID: 4

Motif name: TFF1

Matching format of first motif: Original Motif

Matching format of second motif: Original Motif

Direction: Backward

Position number: 5

Number of overlap: 8

Similarity score: 0.060966

Alignment:

CGGVGCCGCVGC

SCGCGCGG----





Dataset #: 1

Motif ID: 3

Motif name: TFW3

Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Forward

Position number: 3

Number of overlap:

Similarity score: 0.0906073

#### Alignment:

CGCGBMGCCG

--SCGCGCGG



Reverse complement motif

Consensus sequence: CGCGBMGCCG



Dataset #: 1 Motif ID: 3 Motif name: TFW3

Original motif Consensus sequence: CGGCYBCGCG



Reverse complement motif Consensus sequence: CGCGBMGCCG



**Best Matches for Motif ID 3 (Highest to Lowest)** 

Motif ID: 4

Motif name: TFF1

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Backward

Position number: 3
Number of overlap: 10

Similarity score: 0.0623879

Alignment:

CGGVGCCGCVGC CGGCYBCGCG--

Original motif Consensus sequence: CGGVGCCGCVGC





Dataset #: 1

Motif ID: 5

Motif name: TFF11

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Forward

Position number: 1

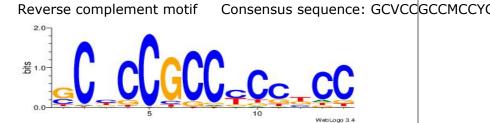
Number of overlap: 10

Similarity score: 0.0645308

Alignment:

GGMGGRGGCGGVGC CGCGBMGCCG----





Dataset #: 2

Motif ID: 12

Motif name: csGCCCCGCCCcsc

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Backward

Position number: 5

Number of overlap: 10

Similarity score: 0.0718771

Alignment:

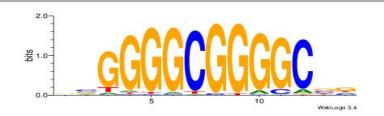
HVGCCCCGCCCBB CGGCYBCGCG----

Original motif Consensus sequence: HVGCCCCGCCCBB

Reverse complement motif

Consensus sequence: BBGGGGCGGGCC





Motif ID: 14

Motif name: cccGCCCCGCCCSb

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Backward

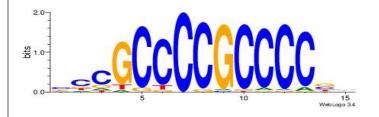
Position number: 5

Number of overlap: 10

Similarity score: 0.0719604

Alignment:

BCCGCCCCGCCCBB
-CGGCYBCGCG----



Reverse complement motif Consensus sequence: BBGGGGCGGGGCGGB



Dataset #: 1

Motif ID: 9

Motif name: TFM12

Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement

Direction: Forward

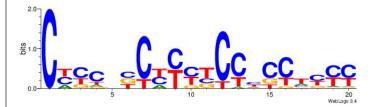
Position number: 11
Number of overlap: 10

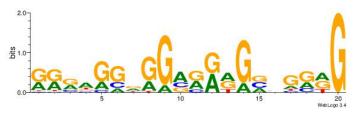
Similarity score: 0.0767689

Alignment:

KKKAGGDGGAKKMGBBGKMG
-----CGCGBMGCCG

Original motif Consensus sequence: CYYCBBCYYYTCCHCCTYYY





Dataset #: 1 Motif ID: 4 Motif name: TFF1

Original motif Consensus sequence: CGGVGCCGCVGC





## **Best Matches for Motif ID 4 (Highest to Lowest)**

Dataset #: 1
Motif ID: 5

Motif name: TFF11

Matching format of first motif:

Matching format of second motif:

Original Motif

Direction:

Backward

Position number: 1
Number of overlap: 12

Similarity score: 0.0292081

Alignment:

GGMGGRGGCGGVGC
--CGGVGCCGCVGC

Original motif Consensus sequence: GGMGGRGGCGGVGC



Reverse complement motif

Consensus sequence: GCVCCGCCMCCYC



Dataset #: 2
Motif ID: 12

Motif name: csGCCCGCCCcsc

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Forward

Position number: 1

Number of overlap: 12

Similarity score: 0.0542674

Alignment:

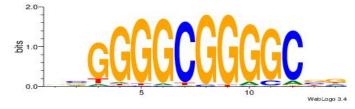
HVGCCCGCCCCBB CGGVGCCGCVGC--

Original motif Consensus sequence: HVGCCCCGCCCCBB



Reverse complement motif

Consensus sequence: BBGGGGCGGGCC



Dataset #: 1

Motif ID: 9

Motif name: TFM12

Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Forward

Position number: 7

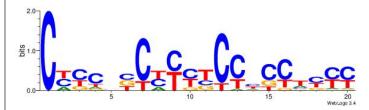
Number of overlap: 12

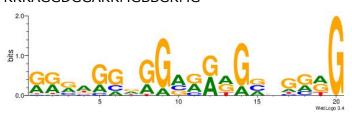
Similarity score: 0.0543272

Alignment:

KKKAGGDGGAKKMGBBGKMG
----CGGVGCCGCVGC--

Original motif Consensus sequence: CYYCBBCYYYTCCHCCTYYY





Dataset #: 2

Motif ID: 14

Motif name: cccGCCCCGCCCSb

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Forward

Position number: 4

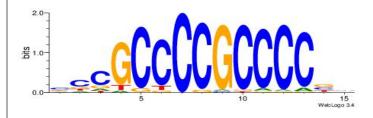
Number of overlap: 12

Similarity score: 0.0548371

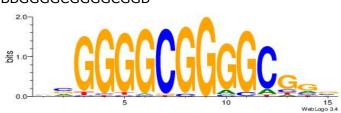
#### Alignment:

BCCGCCCGCCCCBB
---GCVGCGGCBCCG

Original motif Consensus sequence: BCCGCCCCGCCCBB



Reverse complement motif Consensus sequence: BBGGGGCGGGGCGGB



Motif ID: 6

Motif name: TFM2

Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement

Direction: Backward

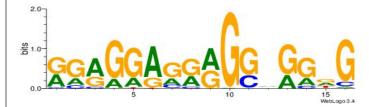
Position number: 3
Number of overlap: 12

Similarity score: 0.0594165

Alignment:

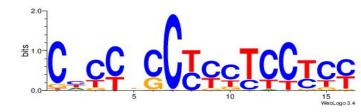
CHCCBCCKMCTCCKCM
--GCVGCGGCBCCG--

Original motif Consensus sequence: RGRGGAGRRGGHGGDG



Reverse complement motif Cor CHCCBCCKMCTCCKCM

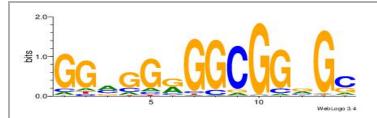
Consensus sequence:

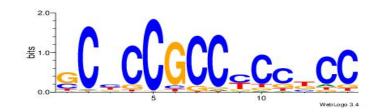


Dataset #: 1 Motif ID: 5 Motif name: TFF11

Reverse complement motif

Consensus sequence: GCVCCGCCMCCYC





# **Best Matches for Motif ID 5 (Highest to Lowest)**

Dataset #: 1

Motif ID: 6

Motif name: TFM2

Matching format of first motif: Original Motif

Matching format of second motif: Original Motif

Direction: Forward

Position number: 1

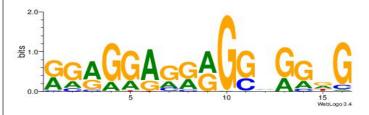
Number of overlap: 14

Similarity score: 0.033716

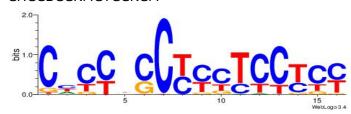
#### Alignment:

RGRGGAGRRGGHGGDG GGMGGRGGCGGVGC--

Original motif Consensus sequence: RGRGGAGRRGGHGGDG



Reverse complement motif Consensus sequence: CHCCBCCKMCTCCKCM



Motif ID: 9

Motif name: TFM12

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Forward

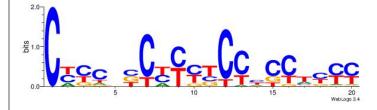
Position number: 6
Number of overlap: 14

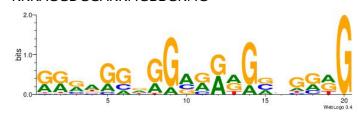
Similarity score: 0.0386905

Alignment:

CYYCBBCYYYTCCHCCTYYY
----GCVCCGCCMCCYCC-

Original motif Consensus sequence: CYYCBBCYYYTCCHCCTYYY





Dataset #: 2

Motif ID: 14

Motif name: cccGCCCCGCCCsb

Matching format of first motif: Reverse Complement

Matching format of second motif:

Original Motif

Direction:

Backward

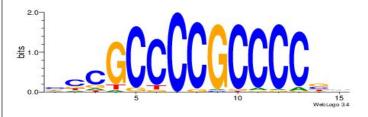
Position number: 2

Number of overlap: 14

Similarity score: 0.0548198

Alignment:

BCCGCCCGCCCCBB
GCVCCGCCMCCYCC-





Dataset #: 2

Motif ID: 12

Motif name: csGCCCGCCCCsc

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: 0.0652173

Alignment:

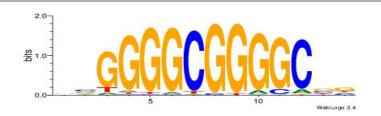
HVGCCCGCCCCBB GCVCCGCCMCCYCC

Original motif Consensus sequence: HVGCCCCGCCCCBB

Reverse complement motif

Consensus sequence: BBGGGGCGGGCC





Motif ID: 4

Motif name: TFF1

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Backward

Position number: 1

Number of overlap: 12

Similarity score: 1.02659

#### Alignment:

--CGGVGCCGCVGC GGMGGRGGCGGVGC

Original motif Consensus sequence: CGGVGCCGCVGC

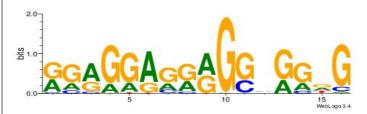


Reverse complement motif

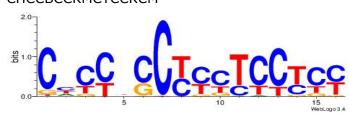
GC\_CC\_

Dataset #: 1 Motif ID: 6 Motif name: TFM2

Consensus sequence: GCVGCGGCBCCG



# Reverse complement motif Consensus sequence: CHCCBCCKMCTCCKCM



# **Best Matches for Motif ID 6 (Highest to Lowest)**

Dataset #: 1
Motif ID: 9

Motif name: TFM12

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Forward

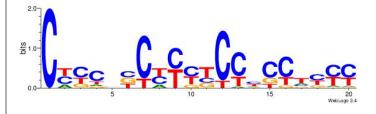
Position number: 1
Number of overlap: 16

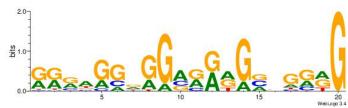
Similarity score: 0.0331473

Alignment:

CYYCBBCYYYTCCHCCTYYY
CHCCBCCKMCTCCKCM----

Original motif Consensus sequence: CYYCBBCYYYTCCHCCTYYY





Motif ID: 11

Motif name: TFM11

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Forward

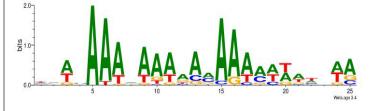
Position number: 8
Number of overlap: 16

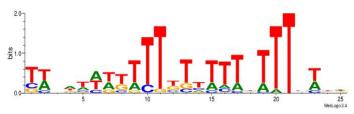
Similarity score: 0.0794752

Alignment:

HDWVAAAHAAAAAMAAAMWWWHBWA
----RGRGGAGRRGGHGGDG--

Original motif Consensus sequence: HDWVAAAHAAAAAMAAAMWWWHBWA





Dataset #: 2

Motif ID: 14

Motif name: cccGCCCCGCCCSb

Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Forward

Position number: 1

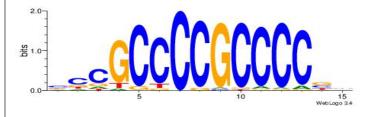
Number of overlap: 15

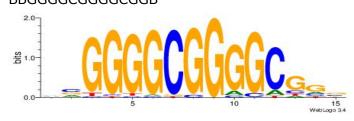
Similarity score: 0.558405

Alignment:

BBGGGGCGGGCGGB-RGRGGAGRRGGHGGDG

Original motif Consensus sequence: BCCGCCCGCCCCBB





Dataset #: 1

Motif ID: 5

Motif name: TFF11

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Forward

Position number: 1

Number of overlap: 14

Similarity score: 1.03372

Alignment:

GGMGGRGGCGGVGC--RGRGGAGRRGGHGGDG Original motif Consensus sequence: GGMGGRGGCGGVGC





Dataset #: 2

Motif ID: 12

Motif name: csGCCCCGCCCcsc

Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Forward

Position number: 1

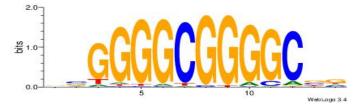
Number of overlap: 14

Similarity score: 1.05955

Alignment:

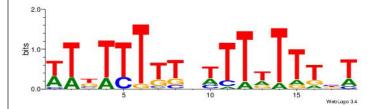
BBGGGGCGGGCVD--RGRGGAGRRGGHGGDG





## Dataset #: 1 Motif ID: 7 Motif name: TFM1

Original motif Consensus sequence: WTKTTTTTHWTTTTTBT



# 

# **Best Matches for Motif ID 7 (Highest to Lowest)**

Dataset #: 1
Motif ID: 11

Motif name: TFM11

Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Forward

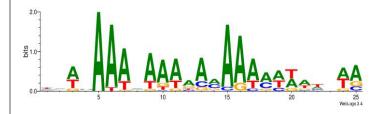
Position number: 6
Number of overlap: 18
Similarity score: 0

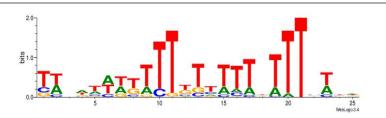
Alignment:

TWVHWWWYTTTYTTTTTHTTTVWBH
----WTKTTTTTHWTTTTTTBT--

Original motif Consensus sequence: HDWVAAAHAAAAAMAAAMWWWHBWA

Reverse complement motif Consensus sequence: TWVHWWWYTTTYTTTTTTTTTVWBH





Motif ID: 10

Motif name: TFM13

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: 0.0364672

Alignment:

ATKAAWTTTTRMAABAHHTW ABAAAAAAWHAAAAARAW--





Dataset #: 1

Motif ID: 8

Motif name: TFM3

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Backward

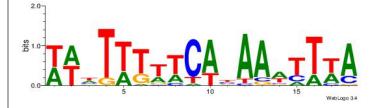
Position number: 1
Number of overlap: 18

Similarity score: 0.0456974

Alignment:

WWHTTTTTCABAAWTTWA WTKTTTTTHWTTTTTTBT

Original motif Consensus sequence: WWHTTTTTCABAAWTTWA





Dataset #: 1

Motif ID: 9

Motif name: TFM12

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Forward

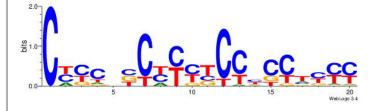
Position number: 4
Number of overlap: 17

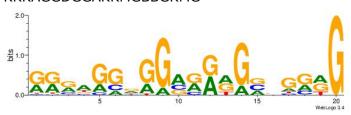
Similarity score: 0.572783

Alignment:

CYYCBBCYYYTCCHCCTYYY---WTKTTTTTHWTTTTTTBT

Original motif Consensus sequence: CYYCBBCYYYTCCHCCTYYY





Dataset #: 2

Motif ID: 17

Motif name: wwwAAATAATAtw
Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Backward

Position number: 1
Number of overlap: 12

Similarity score: 3.0279

Alignment:

----DDTATTATTTDH WTKTTTTTHWTTTTTTBT

Original motif Consensus sequence: HDAAATAATADD

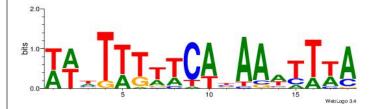
Reverse complement motif

Consensus sequence: DDTATTATTTDH





Dataset #: 1 Motif ID: 8 Motif name: TFM3





# **Best Matches for Motif ID 8 (Highest to Lowest)**

Dataset #: 1

Motif ID: 10

Motif name: TFM13

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Forward

Position number: 2

Number of overlap: 18

Similarity score: 0.00833981

Alignment:

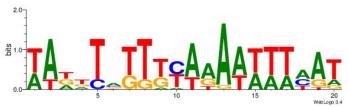
### ATKAAWTTTTRMAABAHHTW

-TWAAWTTVTGAAAAAHWW-

Original motif Consensus sequence: ATKAAWTTTTRMAABAHHTW







Dataset #: 1

Motif ID: 11

Motif name: TFM11

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: 0.0346965

Alignment:

 ${\tt TWVHWWWYTTTYTTTTTTTTTTVWBH}$ 

----WWHTTTTTCABAAWTTWA---

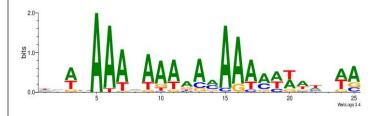
Original motif Consensus sequence:

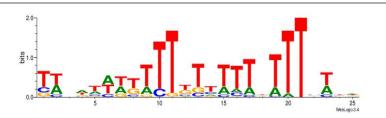
**HDWVAAAHAAAAAMAAAMWWWHBWA** 

Reverse complement motif 

Consensus sequence:

TWVHWWWYTTTYTTTTTHTTTVWBH





Motif ID: 7

Motif name: TFM1

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Backward

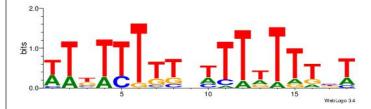
Position number: 1

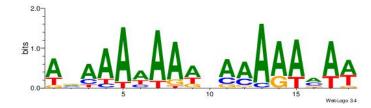
Number of overlap: 18

Similarity score: 0.0376845

## Alignment:

WTKTTTTTHWTTTTTTBT WWHTTTTTCABAAWTTWA





Dataset #: 2

Motif ID: 17

Motif name: wwwAAATAATAtw
Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Backward

Position number: 1
Number of overlap: 12

Similarity score: 3.03666

Alignment:

----DDTATTATTTDH WWHTTTTTCABAAWTTWA

Original motif Consensus sequence: HDAAATAATADD



Reverse complement motif C

Consensus sequence: DDTATTATTTDH



Dataset #: 2

Motif ID: 13

Motif name: tkAAATAATAtw
Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Backward

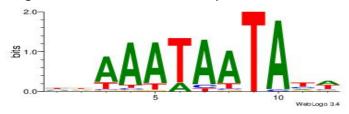
Position number: 1
Number of overlap: 12

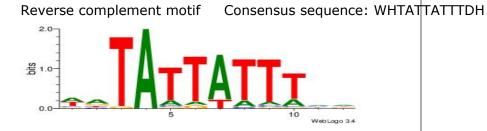
Similarity score: 3.0397

## Alignment:

-----WHTATTATTTDH
WWHTTTTTCABAAWTTWA

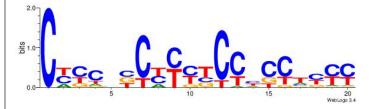
Original motif Consensus sequence: HDAAATAATAHW



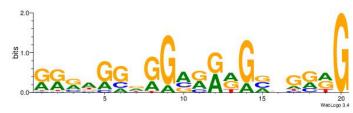


Dataset #: 1 Motif ID: 9 Motif name: TFM12

Original motif Consensus sequence: CYYCBBCYYYTCCHCCTYYY



Reverse complement motif Consensus sequence: KKKAGGDGGAKKMGBBGKMG



# **Best Matches for Motif ID 9 (Highest to Lowest)**

Dataset #: 1

Motif ID: 11

Motif name: TFM11

Matching format of first motif:

Original Motif

Matching format of second motif: Reverse Complement

Direction: Backward

Position number: 6

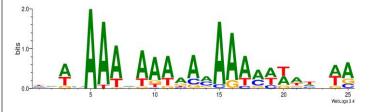
Number of overlap: 20

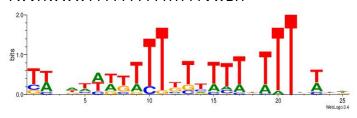
Similarity score: 0.0550447

Alignment:

TWVHWWWYTTTYTTTTTTTTTTVWBH CYYCBBCYYYTCCHCCTYYY----

# Original motif Consensus sequence: HDWVAAAHAAAAAMAAAMWWWHBWA





Dataset #: 1

Motif ID: 7

Motif name: TFM1

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

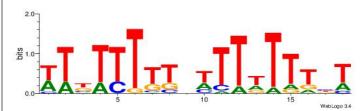
Direction: Backward

Position number: 2
Number of overlap: 17

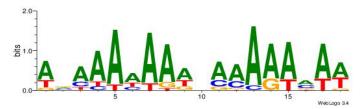
Similarity score: 1.56027

Alignment:

---WTKTTTTTHWTTTTTTBT CYYCBBCYYYTCCHCCTYYY- Original motif Consensus sequence: WTKTTTTTHWTTTTTBT



Reverse complement motif ABAAAAAAWHAAAAARAW Consensus sequence:



Dataset #: 1

Motif ID: 6

Motif name: TFM2

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Forward

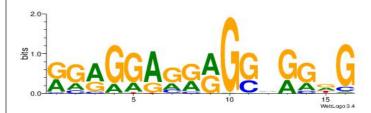
Position number: 1

Number of overlap: 16

Similarity score: 2.0134

Alignment:

RGRGGAGRRGGHGGDG---KKKAGGDGGAKKMGBBGKMG



Reverse complement motif CHCCBCCKMCTCCKCM

Consensus sequence:

Motif ID: 14

Motif name: cccGCCCCGCCCSb

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Backward

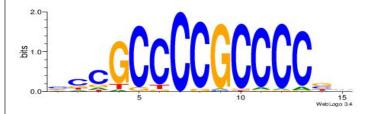
Position number: 1
Number of overlap: 15

Similarity score: 2.54994

Alignment:

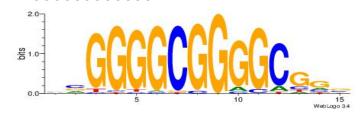
----BCCGCCCGCCCCBB CYYCBBCYYYTCCHCCTYYY

Original motif Consensus sequence: BCCGCCCGCCCCBB



Reverse complement motif Consense BBGGGGCGGGGGGGGGGG

Consensus sequence:



Dataset #: 2

Motif ID: 12

Motif name: csGCCCGCCCsc

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: 3.04796

Alignment:

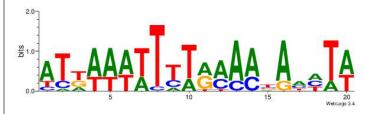
----BBGGGGCGGGCVD KKKAGGDGGAKKMGBBGKMG

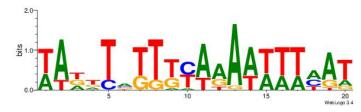




Dataset #: 1 Motif ID: 10 Motif name: TFM13

Original motif Consensus sequence: ATKAAWTTTTRMAABAHHTW





# **Best Matches for Motif ID 10 (Highest to Lowest)**

Dataset #: 1
Motif ID: 11
Motif name: TFM11

Matching format of first motif: Reverse Complement

Matching format of second motif: **Reverse Complement** 

Direction: Forward

Position number: 5

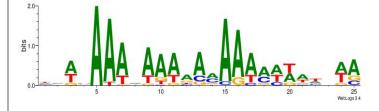
Number of overlap: 20

Similarity score: 0.0352451

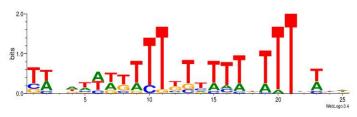
## Alignment:

TWVHWWWYTTTYTTTTTTTTTVWBH ----WAHHTVTTYKAAAAWTTRAT-

#### Original motif Consensus sequence: **HDWVAAAHAAAAAMAAAMWWWHBWA**



#### Reverse complement motif Consensus sequence: **TWVHWWWYTTTYTTTTTHTTTVWBH**



Dataset #: 1

Motif ID: 8

TFM3 Motif name:

Matching format of first motif: Original Motif

Matching format of second motif: **Reverse Complement** 

Direction: Forward

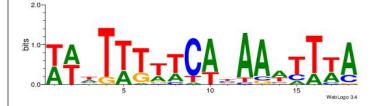
Position number: 1 Number of overlap: 18

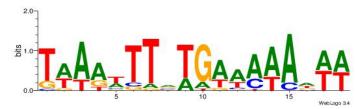
1.02254 Similarity score:

Alignment:

## TWAAWTTVTGAAAAAHWW--ATKAAWTTTTRMAABAHHTW

Original motif Consensus sequence: WWHTTTTTCABAAWTTWA





Dataset #: 1

Motif ID: 7

Motif name: TFM1

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: 1.02868

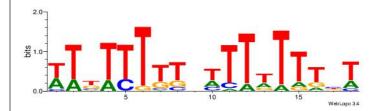
Alignment:

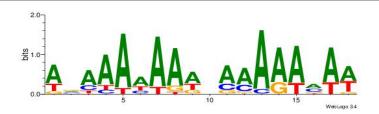
WTKTTTTHWTTTTTTBT--WAHHTVTTYKAAAAWTTRAT

Original motif Consensus sequence: WTKTTTTTHWTTTTTBT

Reverse complement motif ABAAAAAAWHAAAAARAW

Consensus sequence:





Motif ID: 13

Motif name: tkAAATAATAtw

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Backward

Position number: 1

Number of overlap: 12

Similarity score: 4.03399

Alignment:

-----HDAAATAATAHW

WAHHTVTTYKAAAAWTTRAT

Original motif Consensus sequence: HDAAATAATAHW



Reverse complement motif Co

Consensus sequence: WHTATTATTTDH



Motif ID: 17

Motif name: wwAAATAATAtw

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Backward

Position number: 1

Number of overlap: 12

Similarity score: 4.03484

Alignment:

-----HDAAATAATADD
WAHHTVTTYKAAAAWTTRAT

Original motif Consensus sequence: HDAAATAATADD



Reverse complement motif

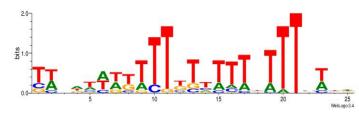
Consensus sequence: DDTATTATTTDH



Dataset #: 1 Motif ID: 11 Motif name: TFM11

Original motif Consensus sequence: HDWVAAAHAAAAAMAAAMWWWHBWA





## **Best Matches for Motif ID 11 (Highest to Lowest)**

Dataset #: 1
Motif ID: 10

Motif name: TFM13

Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement

Direction: Forward

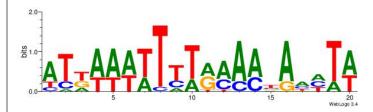
Position number: 1
Number of overlap: 20

Similarity score: 0.0486765

Alignment:

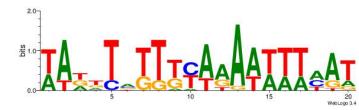
WAHHTVTTYKAAAAWTTRAT---TWVHWWWYTTTYTTTTTTTTTVWBH

Original motif Consensus sequence: ATKAAWTTTTRMAABAHHTW



Reverse complement motif Consensu WAHHTVTTYKAAAAWTTRAT

Consensus sequence:



Dataset #: 1

Motif ID: 9

Motif name: TFM12

Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Forward

Position number: 1

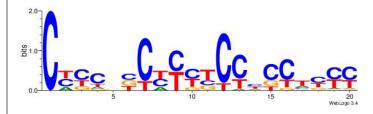
Number of overlap: 20

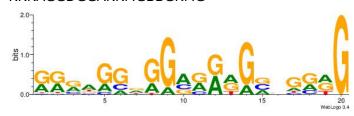
Similarity score: 0.0693284

Alignment:

KKKAGGDGGAKKMGBBGKMG---HDWVAAAHAAAAAMAAAMWWWHBWA

Original motif Consensus sequence: CYYCBBCYYYTCCHCCTYYY





Dataset #: 1

Motif ID: 7

Motif name: TFM1

Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Backward

Position number: 1

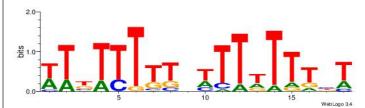
Number of overlap: 18

Similarity score: 1.0232

Alignment:

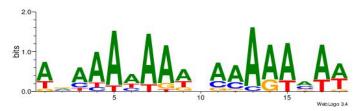
----ABAAAAAWHAAAAARAW HDWVAAAHAAAAAAAAAAAAAAAMWWWHBWA

Original motif Consensus sequence: WTKTTTTTHWTTTTTBT



Reverse complement motif ABAAAAAAWHAAAAARAW

Consensus sequence:



Dataset #: 1

Motif ID: 8

Motif name: TFM3

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Forward

Position number: 1

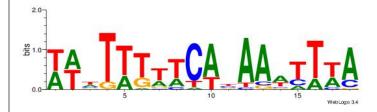
Number of overlap: 18

Similarity score: 1.05388

Alignment:

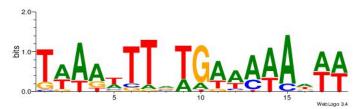
WWHTTTTTCABAAWTTWA----TWVHWWWYTTTYTTTTTTTTTVWBH

Original motif Consensus sequence: WWHTTTTTCABAAWTTWA



Reverse complement motif TWAAWTTVTGAAAAAHWW

Consensus sequence:



Motif ID: 17

Motif name: wwAAATAATAtw

Matching format of first motif: Original Motif

Matching format of second motif: Original Motif

Direction: Forward

Position number: 1

Number of overlap: 12

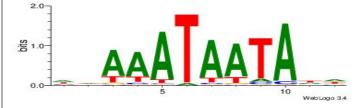
Similarity score: 4.03464

Alignment:

HDAAATAATADD-----

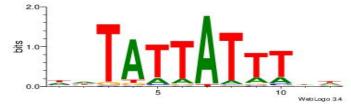
HDWVAAAHAAAAAMAAAMWWWHBWA

Original motif Consensus sequence: HDAAATAATADD



Reverse complement motif

Consensus sequence: DDTATTATTTDH



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

Original motif Consensus sequence: HVGCCCCGCCCBB



Reverse complement motif

Consensus sequence: BBGGGGCGGGCC



## **Best Matches for Motif ID 12 (Highest to Lowest)**

Dataset #: 2
Motif ID: 14

Motif name: cccGCCCCGCCCSb

Matching format of first motif:

Matching format of second motif:

Original Motif

Direction:

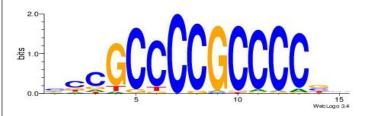
Backward

Position number: 1
Number of overlap: 14
Similarity score: 0

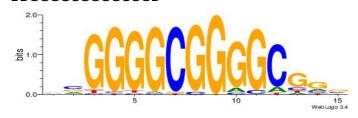
## Alignment:

BCCGCCCGCCCCBB
-HVGCCCCGCCCCBB

Original motif Consensus sequence: BCCGCCCGCCCCBB



Consensus sequence:



Dataset #: 1

Motif ID: 9

Motif name: TFM12

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Backward

Position number: 4

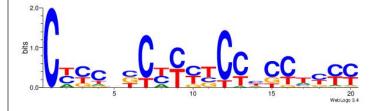
Number of overlap: 14

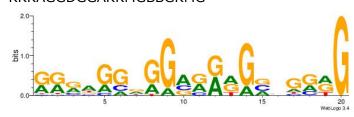
Similarity score: 0.0777991

Alignment:

CYYCBBCYYYTCCHCCTYYY
---HVGCCCCGCCCCBB---

Original motif Consensus sequence: CYYCBBCYYYTCCHCCTYYY





Dataset #: 1

Motif ID: 6

Motif name: TFM2

Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

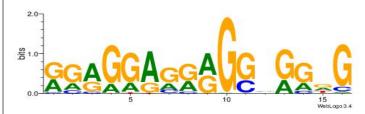
Direction: Backward

Position number: 3
Number of overlap: 14

Similarity score: 0.0880609

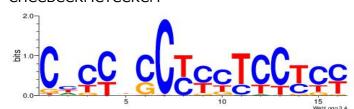
Alignment:

CHCCBCCKMCTCCKCM
HVGCCCCGCCCCBB--



Reverse complement motif
CHCCBCCKMCTCCKCM

Consensus sequence:



Dataset #: 1

Motif ID: 5

Motif name: TFF11

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: 0.0937271

Alignment:

GGMGGRGGCGGVGC BBGGGGCGGGCVD



Reverse complement motif

Consensus sequence: GCVCC GCCMCCYC



Motif ID: 18

Motif name: sSGTCACGTGACSs

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: 0.0971132

Alignment:

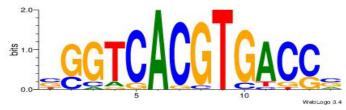
SGGTCACGTGACCS HVGCCCCGCCCCBB

Original motif Consensus sequence: SGGTCACGTGACCS



Reverse complement motif Con

Consensus sequence: SGGTCACGTGACC



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

Original motif Consensus sequence: HDAAATAATAHW



Reverse complement motif

Consensus sequence: WHTATTATTTDH

## **Best Matches for Motif ID 13 (Highest to Lowest)**

Dataset #: 2 Motif ID: 17

Motif name: wwAAATAATAtw Matching format of first motif: Original Motif Matching format of second motif: Original Motif

Forward Direction:

Position number: 1 Number of overlap: 12 Similarity score: 0

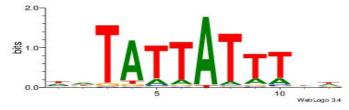
Alignment:

HDAAATAATADD HDAAATAATAHW

Consensus sequence: HDAAATAATADD Original motif



Reverse complement motif Consensus sequence: DDTATTATTTDH



Dataset #: 1 Motif ID: 11 Motif name: TFM11

Matching format of first motif: **Reverse Complement Reverse Complement** 

Matching format of second motif:

Direction: Forward

Position number: 12

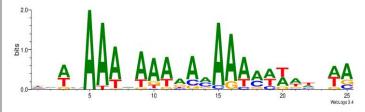
Number of overlap: 12

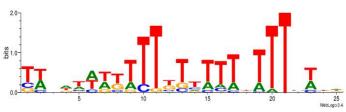
Similarity score: 0.0590505

Alignment:

TWVHWWWYTTTYTTTTTTTTTTVWBH
-----WHTATTATTTDH--

Original motif Consensus sequence: HDWVAAAHAAAAAMAAAMWWWHBWA





Dataset #: 1

Motif ID: 7

Motif name: TFM1

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Forward

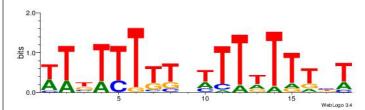
Position number: 1

Number of overlap: 12

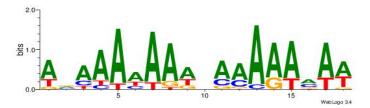
Similarity score: 0.0637702

Alignment:

WTKTTTTTHWTTTTTTBT WHTATTATTTDH----- Original motif Consensus sequence: WTKTTTTTHWTTTTTBT



Reverse complement motif ABAAAAAAWHAAAAARAW Consensus sequence:



Dataset #: 1

Motif ID: 10

Motif name: TFM13

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Forward

Position number: 9

Number of overlap: 12

Similarity score: 0.0704475

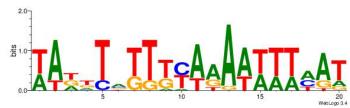
Alignment:

ATKAAWTTTTRMAABAHHTW
-----WHTATTATTTDH



Reverse complement motif WAHHTVTTYKAAAAWTTRAT

Consensus sequence:



Motif ID: 8

Motif name: TFM3

Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Backward

Position number: 1

Number of overlap: 12

Similarity score: 0.0763819

Alignment:

TWAAWTTVTGAAAAAHWW
-----HDAAATAATAHW

Original motif Consensus sequence: WWHTTTTTCABAAWTTWA



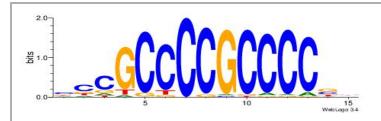
Reverse complement motif
TWAAWTTVTGAAAAAHWW

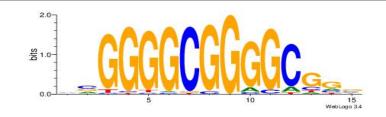
Consensus sequence:



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

 Consensus sequence:





# **Best Matches for Motif ID 14 (Highest to Lowest)**

Dataset #: 1

Motif ID: 9

Motif name: TFM12

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Forward

Position number: 3

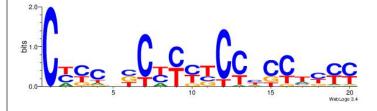
Number of overlap: 15

Similarity score: 0.0773345

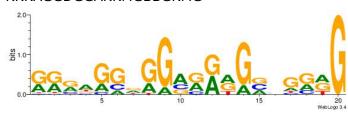
## Alignment:

CYYCBBCYYYTCCHCCTYYY
--BCCGCCCCGCCCCBB---

Original motif Consensus sequence: CYYCBBCYYYTCCHCCTYYY



Reverse complement motif Consensus sequence: KKKAGGDGGAKKMGBBGKMG



Motif ID: 6

Motif name: TFM2

Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Forward

Position number: 1

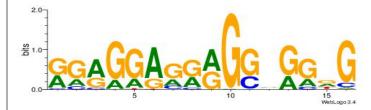
Number of overlap: 15

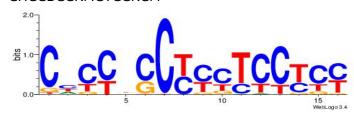
Similarity score: 0.0869149

Alignment:

CHCCBCCKMCTCCKCM
BCCGCCCCGCCCCBB-

Original motif Consensus sequence: RGRGGAGRRGGHGGDG





Dataset #: 2

Motif ID: 12

Motif name: csGCCCGCCCsc

Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement

Direction: Forward

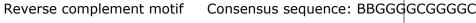
Position number: 1

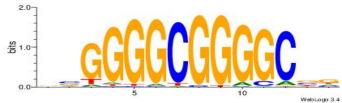
Number of overlap: 14
Similarity score: 0.5

Alignment:

BBGGGGCGGGCVD-BBGGGGCGGGGCGGB







Dataset #: 1

Motif ID: 5

Motif name: TFF11

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: 0.58333

Alignment:

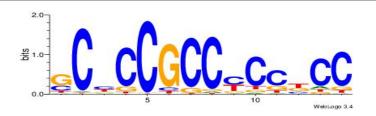
GGMGGRGGCGGVGC-BBGGGGCGGGGCGGB

Original motif Consensus sequence: GGMGGRGGCGGVGC

Reverse complement motif

Consensus sequence: GCVCCGCCMCCYC





Motif ID: 18

Motif name: sSGTCACGTGACSs

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: 0.601399

Alignment:

SGGTCACGTGACCS-BBGGGGCGGGGCGGB



Reverse complement motif

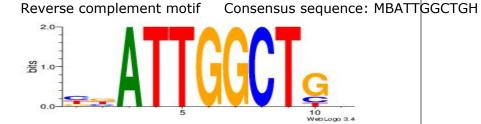
Consensus sequence: SGGTCACGTGACC



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

Original motif Consensus sequence: DCAGCCAATVR





# **Best Matches for Motif ID 15 (Highest to Lowest)**

Dataset #: 2

Motif ID: 13

Motif name: tkAAATAATAtw

Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement

Direction: Forward

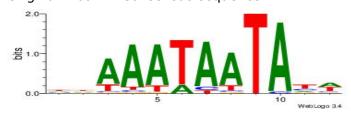
Position number: 2
Number of overlap: 11

Similarity score: 0.0320614

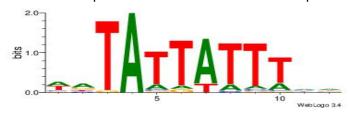
Alignment:

WHTATTATTTDH
-MBATTGGCTGH

Original motif Consensus sequence: HDAAATAATAHW



Reverse complement motif Consensus sequence: WHTATTATTTDH



Motif ID: 20

Motif name: dhACATTCTkh
Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Backward

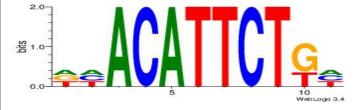
Position number: 1
Number of overlap: 11

Similarity score: 0.034958

Alignment:

HCAGAATGTHD DCAGCCAATVR

Original motif Consensus sequence: DHACATTCTGH





Dataset #: 2

Motif ID: 17

Motif name: wwAAATAATAtw

Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement

Direction: Forward

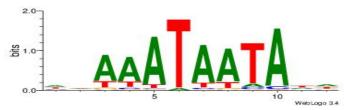
Position number: 2
Number of overlap: 11

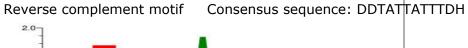
Similarity score: 0.0358988

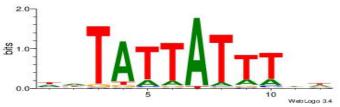
Alignment:

DDTATTATTTDH
-MBATTGGCTGH

Original motif Consensus sequence: HDAAATAATADD







Dataset #: 2

Motif ID: 16

Motif name: kcACCTGCAgc

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Backward

Position number: 1

Number of overlap: 11

Similarity score: 0.0360892

Alignment:

BCACCTGCABC MBATTGGCTGH

Original motif Consensus sequence: BCACCTGCABC

Reverse complement motif

Consensus sequence: GBTGCAGGTGB





Motif ID: 5

Motif name: TFF11

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Backward

Position number: 2

Number of overlap: 11

Similarity score: 0.0376063

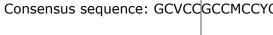
#### Alignment:

GGMGGRGGCGGVGC

--MBATTGGCTGH-



Reverse complement motif





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

#### Original motif Consensus sequence: BCACCTGCABC



Reverse complement motif

## **Best Matches for Motif ID 16 (Highest to Lowest)**

Dataset #: 2
Motif ID: 19

Motif name: wsTACwGTAsw
Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Backward

Position number: 1
Number of overlap: 11

Similarity score: 0.0182895

#### Alignment:

DBTACWGTAVH BCACCTGCABC

Original motif Consensus sequence: HVTACWGTABD





Consensus sequence: GBTGCAGGTGB

Motif ID: 20

Motif name: dhACATTCTkh
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward

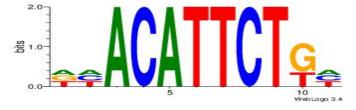
Position number: 1
Number of overlap: 11

Similarity score: 0.0221745

Alignment:

DHACATTCTGH BCACCTGCABC

Original motif Consensus sequence: DHACATTCTGH



Reverse complement motif Consensus sequence: HCAGAATGTHD



Dataset #: 2

Motif ID: 18

Motif name: sSGTCACGTGACSs

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Forward

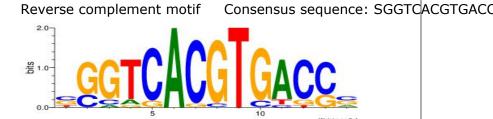
Position number: 4
Number of overlap: 11

Similarity score: 0.0280991

Alignment:

SGGTCACGTGACCS
---BCACCTGCABC





Dataset #: 1

Motif ID: 5

Motif name: TFF11

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Backward

Position number: 4

Number of overlap: 11

Similarity score: 0.0312321

Alignment:

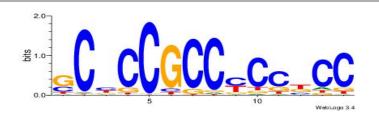
GGMGGRGGCGGVGC GBTGCAGGTGB---

Original motif Consensus sequence: GGMGGRGGCGGVGC

Reverse complement motif

Consensus sequence: GCVCCGCCMCCYC





Motif ID: 12

Motif name: csGCCCGCCCcsc

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Forward

Position number: 2

Number of overlap: 11

Similarity score: 0.0370129

#### Alignment:

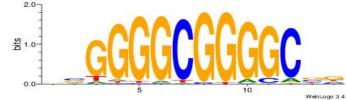
HVGCCCCGCCCBB
-BCACCTGCABC--

Original motif Consensus sequence: HVGCCCCGCCCBB



Reverse complement motif

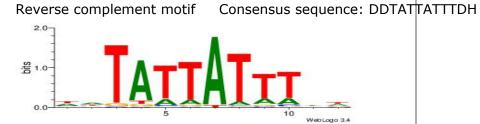
Consensus sequence: BBGGGGCGGGGC



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

#### Original motif Consensus sequence: HDAAATAATADD





## **Best Matches for Motif ID 17 (Highest to Lowest)**

Dataset #: 2

Motif ID: 13
Motif name: tkAAAT

Motif name: tkAAATAATAtw

Matching format of first motif: Original Motif

Matching format of second motif: Original Motif

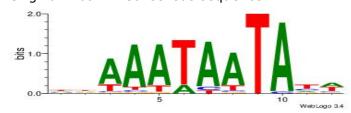
Direction: Forward

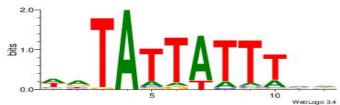
Position number: 1
Number of overlap: 12
Similarity score: 0

#### Alignment:

HDAAATAATAHW HDAAATAATADD

Original motif Consensus sequence: HDAAATAATAHW





Motif ID: 7

Motif name: TFM1

Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Forward

Position number: 7

Number of overlap: 12

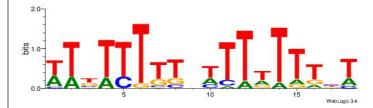
Similarity score: 0.0565705

Alignment:

ABAAAAAWHAAAAARAW

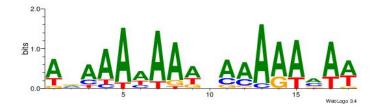
----HDAAATAATADD

Original motif Consensus sequence: WTKTTTTTHWTTTTTBT



Reverse complement motif
ABAAAAAAWHAAAAARAW

Consensus sequence:



Dataset #: 1

Motif ID: 11

Motif name: TFM11

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Forward

Position number: 3

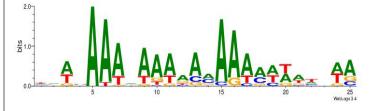
Number of overlap: 12

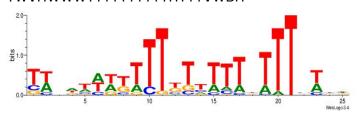
Similarity score: 0.0575935

#### Alignment:

HDWVAAAHAAAAAMAAAMWWWHBWA
--HDAAATAATADD-----

Original motif Consensus sequence: HDWVAAAHAAAAAMAAAMWWWHBWA





Dataset #: 1

Motif ID: 10

Motif name: TFM13

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Backward

Position number: 1

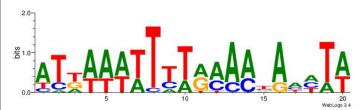
Number of overlap: 12

Similarity score: 0.0712963

Alignment:

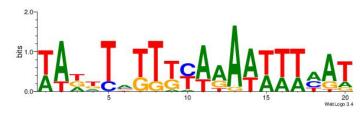
ATKAAWTTTTRMAABAHHTW -----DDTATTATTTDH

Original motif Consensus sequence: ATKAAWTTTTRMAABAHHTW



Reverse complement motif WAHHTVTTYKAAAAWTTRAT

Consensus sequence:



Dataset #: 1

Motif ID: 8

Motif name: TFM3

Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Backward

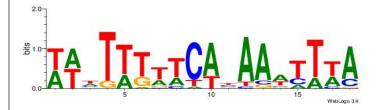
Position number: 1

Number of overlap: 12

Similarity score: 0.0733516

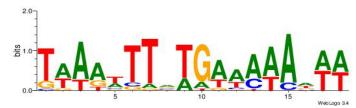
Alignment:

TWAAWTTVTGAAAAAHWW
-----HDAAATAATADD



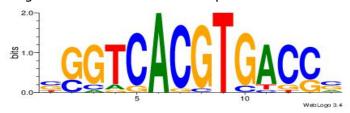
Reverse complement motif TWAAWTTVTGAAAAAHWW

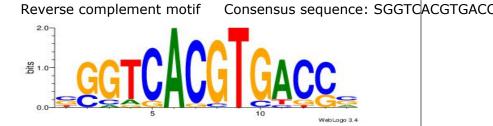
Consensus sequence:



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

Original motif Consensus sequence: SGGTCACGTGACCS





# **Best Matches for Motif ID 18 (Highest to Lowest)**

Dataset #: 2

Motif ID: 12

Motif name: csGCCCCGCCCcsc

Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Forward

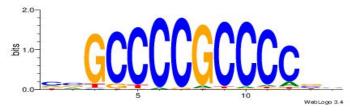
Position number: 1
Number of overlap: 14

Similarity score: 0.0539097

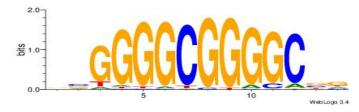
#### Alignment:

BBGGGGGGGCVD SGGTCACGTGACCS

Original motif Consensus sequence: HVGCCCCGCCCBB



Reverse complement motif Consensus sequence: BBGGGGCGGGGC



Motif ID: 14

Motif name: cccGCCCCGCCCsb

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Forward

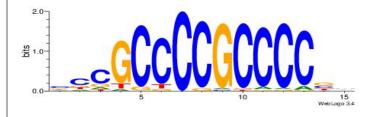
Position number: 1
Number of overlap: 14

Similarity score: 0.0581955

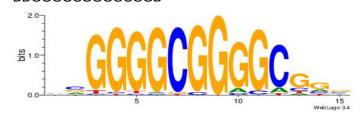
Alignment:

BCCGCCCGCCCBB SGGTCACGTGACCS-

Original motif Consensus sequence: BCCGCCCGCCCCBB



Reverse complement motif Consensus sequence: BBGGGGCGGGGCGGB



Dataset #: 1
Motif ID: 5

Motif name: TFF11

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: 1.05855

Alignment:

--GCVCCGCCMCCYCC SGGTCACGTGACCS--



Reverse complement motif Consensus sequence: GCVCCGCCMCCYC



Dataset #: 1

Motif ID: 4

Motif name: TFF1

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Backward

Position number: 1

Number of overlap: 12

Similarity score: 1.06047

Alignment:

--CGGVGCCGCVGC SGGTCACGTGACCS

Original motif Consensus sequence: CGGVGCCGCVGC

Reverse complement motif

Consensus sequence: GCVGCGGCBCCG





Motif ID: 16

Motif name: kcACCTGCAgc

Matching format of first motif: Original Motif

Matching format of second motif: Original Motif

Direction: Backward

Position number: 1

Number of overlap: 11

Similarity score: 1.54742

#### Alignment:

---BCACCTGCABC
SGGTCACGTGACCS

Original motif Consensus sequen

Consensus sequence: BCACCTGCABC



Reverse complement motif

Consensus sequence: GBTGCAGGTGB



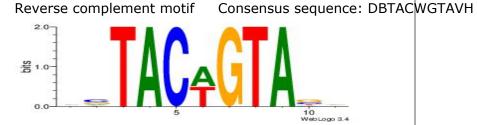
Dataset #: 2

Motif ID: 19

**Motif name: wsTACwGTAsw** 

#### Original motif Consensus sequence: HVTACWGTABD





# **Best Matches for Motif ID 19 (Highest to Lowest)**

Dataset #: 2
Motif ID: 16

Motif name: kcACCTGCAgc Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

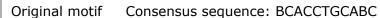
Direction: Backward

Position number: 1
Number of overlap: 11

Similarity score: 0.0199592

#### Alignment:

GBTGCAGGTGB HVTACWGTABD





#### 



Motif ID: 17

Motif name: wwwAAATAATAtw
Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Backward

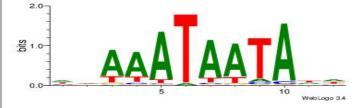
Position number: 1
Number of overlap: 11

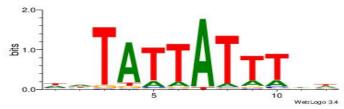
Similarity score: 0.0309343

Alignment:

DDTATTATTTDH
-HVTACWGTABD

Original motif Consensus sequence: HDAAATAATADD





Dataset #: 2

Motif ID: 13

Motif name: tkAAATAATAtw

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Forward

Position number: 1

Number of overlap: 11

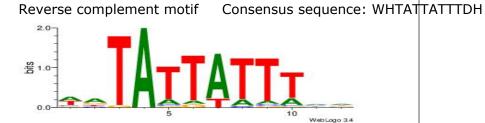
Similarity score: 0.0337121

Alignment:

HDAAATAATAHW DBTACWGTAVH-

Original motif Consensus sequence: HDAAATAATAHW





Dataset #: 2

Motif ID: 21

Motif name: wbgTAAATAww

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Backward

Position number: 1

Number of overlap: 11

Similarity score: 0.037518

Alignment:

DBGTAAATAHD DBTACWGTAVH

Original motif Consensus sequence: DBGTAAATAHD Reverse complement motif Consensus sequence: DHTATITACBD





Motif ID: 8

Motif name: TFM3

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Backward

Position number: 5

Number of overlap: 11

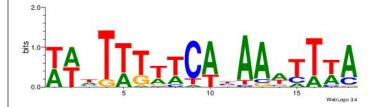
Similarity score: 0.0413797

Alignment:

WWHTTTTTCABAAWTTWA

---DBTACWGTAVH----

Original motif Consensus sequence: WWHTTTTTCABAAWTTWA



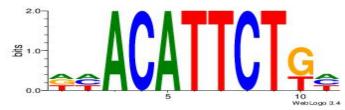
Reverse complement motif Conse TWAAWTTVTGAAAAAHWW

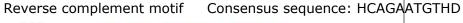
Consensus sequence:



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

Original motif Consensus sequence: DHACATTCTGH







# **Best Matches for Motif ID 20 (Highest to Lowest)**

Dataset #: 1

Motif ID: 8

Motif name: TFM3

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Backward

Position number: 8

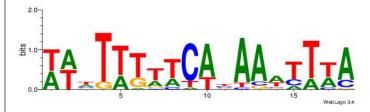
Number of overlap: 11

Similarity score: 0.00522383

Alignment:

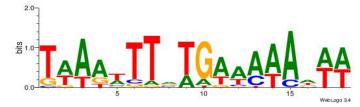
WWHTTTTTCABAAWTTWA HCAGAATGTHD-----

Original motif Consensus sequence: WWHTTTTTCABAAWTTWA



Reverse complement motif TWAAWTTVTGAAAAAHWW

Consensus sequence:



Motif ID: 16

Motif name: kcACCTGCAgc
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward

Position number: 1
Number of overlap: 11

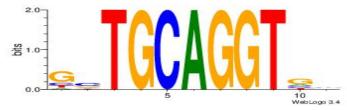
Similarity score: 0.00731643

Alignment:

BCACCTGCABC DHACATTCTGH

Original motif Consensus sequence: BCACCTGCABC





Dataset #: 2

Motif ID: 17

Motif name: wwAAATAATAtw

Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement

Direction: Forward

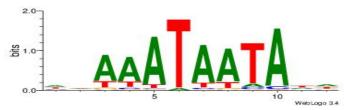
Position number: 2
Number of overlap: 11

Similarity score: 0.0127231

Alignment:

DDTATTATTTDH
-HCAGAATGTHD

Original motif Consensus sequence: HDAAATAATADD





Dataset #: 1

Motif ID: 11

Motif name: TFM11

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Forward

Position number: 5

Number of overlap: 11

Similarity score: 0.014258

Alignment:

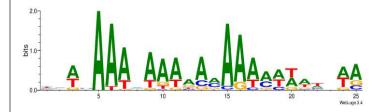
HDWVAAAHAAAAAMAAAMWWWHBWA

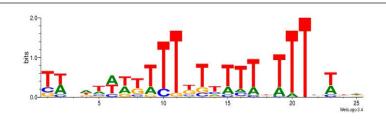
----HCAGAATGTHD-----

Original motif Consensus sequence:

HDWVAAAHAAAAAMAAAMWWWHBWA

TWVHWWWYTTTYTTTTTHTTTVWBH





Motif ID: 10

Motif name: TFM13

Matching format of first motif:

Matching format of second motif:

Original Motif

Original Motif

Direction: Backward

Position number: 9

Number of overlap: 11

Similarity score: 0.0192045

Alignment:

ATKAAWTTTTRMAABAHHTW -DHACATTCTGH-----

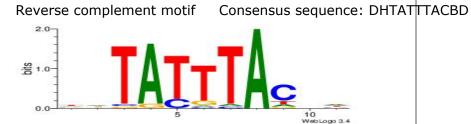




Dataset #: 2 Motif ID: 21 Motif name: wbgTAAATAww

#### Original motif Consensus sequence: DBGTAAATAHD





# **Best Matches for Motif ID 21 (Highest to Lowest)**

Dataset #: 2

Motif ID: 13

Motif name: tkAAATAATAtw

Matching format of first motif: Original Motif

Matching format of second motif: Original Motif

Direction: Backward

Position number: 1

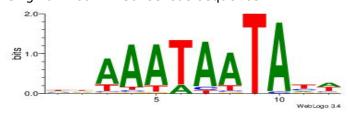
Number of overlap: 11

Similarity score: 0.0162338

#### Alignment:

HDAAATAATAHW
-DBGTAAATAHD

#### Original motif Consensus sequence: HDAAATAATAHW







Motif ID: 17

Motif name: wwAAATAATAtw

Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement

Direction: Backward

Position number: 2
Number of overlap: 11

Similarity score: 0.0164863

Alignment:

DDTATTATTTDH
DHTATTTACBD-

Original motif Consensus sequence: HDAAATAATADD





Dataset #:

Motif ID: 11

Motif name: TFM11

Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement

Direction: Forward

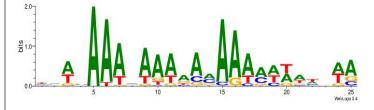
Position number: 15
Number of overlap: 11

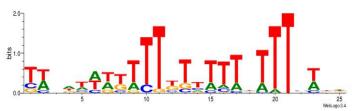
Similarity score: 0.0192768

Alignment:

TWVHWWWYTTTYTTTTTTTTTVWBH
-----DHTATTTACBD

Original motif Consensus sequence: HDWVAAAHAAAAAMAAAMWWWHBWA





Dataset #: 1

Motif ID: 7

Motif name: TFM1

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Forward

Position number: 1

Number of overlap: 11
Similarity score: 0.0283217

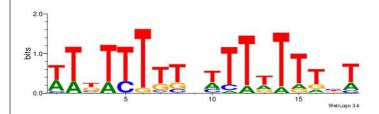
Alignment:

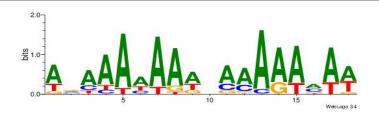
WTKTTTTTHWTTTTTTBT DHTATTTACBD-----

Original motif Consensus sequence: WTKTTTTTHWTTTTTBT

Reverse complement motif
ABAAAAAAWHAAAAARAW

Consensus sequence:





Motif ID: 8

Motif name: TFM3

Matching format of first motif: Reverse Complement

Matching format of second motif: Original Motif

Direction: Backward

Position number: 2

Number of overlap: 11

Similarity score: 0.0308097

Alignment:

WWHTTTTTCABAAWTTWA

----DHTATTTACBD-



Reverse complement motif TWAAWTTVTGAAAAAHWW

Consensus sequence:



Results created by MOTIFSIM on 06-18-2018 21:47:01

Runtime: 633.592 seconds

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