## MOTIFSIM - MOTIF SIMilarity Detection Tool

## Version 2.2

## INPUT

```
Input Parameters
Number of files: 2
Number of top significant motifs: 10
Number of best matches: 10
Similarity cutoff >= 0.75
Matching motif database: UniProbe Mus Musculus
Motif tree:
Yes
Combined similar motifs: Yes
Output file type: All
Output file format: All
Input files and motif counts
\begin{tabular}{lll} 
File name & Count of motifs & Dataset number \\
MEME-ChIP_DM721.txt & 11 & 1 \\
PScanChIP_DM721.txt & 37 & 2 \\
\hline
\end{tabular}
```


## RESULTS

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

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

Original motif Consensus sequence: CTCTGY


Reverse complement motif Consensus sequence: KCAGAG


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

```
Dataset \#:
2
```

Motif ID:
Motif name:
Matching format of first motif:
Matching format of second motif:
Direction:
Position number:
Number of overlap:
Similarity score:

43
NR1H2RXRA
Reverse Complement
Original Motif
Backward
7
6
0.012269

Alignment:
AAAGGTCAAAGGTCAAC
------KCAGAG------

Original motif Consensus sequence: AAAGGTCAAAGGTCAAC


Reverse complement motif Consensus sequence: GTTGACCTITGACCTTT



```
Number of overlap: 
```

Reverse complement motif Consensus sequence: AKGYYCAAAGRTC


## Dataset \#:

2
Motif ID:
Motif name:
Matching format of first motif:
Matching format of second motif:
Direction:
Position number:
Number of overlap:
Similarity score:
Alignment:
RGGBCAAAGKYCA
---KCAGAG----
Original motif Consensus sequence: RGGBCAAAGKYCA

|  |  |
| :---: | :---: |
| Dataset \#: 2 |  |
| Motif ID: 37 |  |
| Motif name: MIZF |  |
| Matching format of first motif: Original Motif |  |
| Matching format of second motif: Original Motif |  |
| Direction: Forward |  |
| Position number: 5 |  |
| Number of overlap: 6 |  |
| Similarity score: 0.0221665 |  |
| Alignment: <br> BAACGTCCGC |  |
|  | Reverse complement motif Consensus sequence: GCGGA |
| Dataset \#: 2 |  |
| Motif ID: 35 |  |

```
Motif name:
Matching format of first motif:
Matching format of second motif:
Direction:
Position number:
Number of overlap: 6
Similarity score:
INSM1
Reverse Complement
Original Motif
Backward
5
0.0255256
Alignment:
TGYCAGGGGGCR
--KCAGAG----
```

Original motif Consensus sequence: TGYCAGGGGGCR


Reverse complement motif Consensus sequence: MGCCCCCTGMCA


## Dataset \#:

2
Motif ID:
16
Motif name: SP1
Matching format of first motif:
Matching format of second motif:
Direction:
Original Motif
Original Motif
Backward
Position number:
5
Number of overlap:
6
Similarity score:
0.0349642

Alignment:
CCCCKCCCCC
CTCTGY----

Original motif Consensus sequence: CCCCKCCCCC
(20)

Reverse complement motif Consensus sequence: GGGGGYGGGG


Dataset \#: 2
Motif ID:
Motif name:
Matching format of first motif:
Matching format of second motif:
Direction:
Position number:
Number of overlap:
Similarity score:

Alignment:
GGYGCTGTCCATGGTGCTGAA
--CTCTGY--------------

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC

Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA


Dataset \#:2
Motif ID: ..... 12
Motif name: ..... Zfx
Matching format of first motif:Matching format of second motif:Direction:Reverse Complement
Original Motif
Forward
Position number: ..... 4
Number of overlap: ..... 6Similarity score:0.0448449
Alignment:
BBVGCCBVGGCCTV
---KCAGAG-----
Original motif Consensus sequence: BBVGCCBVGGCCTV

Reverse complement motif Consensus sequence: VAGGCCBBGGCVE

Dataset \#:
Dataset \#:
2
2
Motif ID:
Motif ID:
29
29


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

Dataset \#: ..... 2
Motif ID: ..... 18
Motif name: ..... RREB1Matching format of first motif:Matching format of second motif:Direction:
Reverse Complement
Reverse Complement
Backward
10
Position number:
5
Number of overlap:
0.0256083
Similarity score:Alignment:
BGRRRGRGGRTGRTTYGGGG
------RARAT----------

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV


Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG


## Dataset \#:

2
Motif ID:
Motif name:
Matching format of first motif:
Matching format of second motif:

44
NR4A2
Reverse Complement
Original Motif

| Direction: | Backward |
| :--- | :---: |
| Position number: | 4 |
| Number of overlap: | 5 |
| Similarity score: | 0.0276382 |
| Alignment: |  |
| AAGGTCAC |  |
| RARAT--- |  |



Dataset \#:
Motif ID:
Motif name:
Matching format of first motif:
Matching format of second motif:
Direction:
Position number:
Number of overlap:
Similarity score:
Alignment:
AKGYYCAAAGRTCA
-------RARAT--

## 2

## 22

NR2F1
Reverse Complement
Reverse Complement
Backward
3
5
0.0279129

## Original motif Consensus sequence: TGAMCTTTGMMCYT <br> 

Reverse complement motif Consensus sequence: AKGYYCAAAGRTC


Dataset \#: 2
Motif ID:
Motif name:
Matching format of first motif:
Matching format of second motif:
Direction:
Position number:
Number of overlap:
5
Similarity score:
0.0292478

Alignment:
BAACGTCCGC
--ATKTM---


Reverse complement motif Consensus sequence: GCGGACGTTV



```
Number of overlap: 5
Similarity score: 0.0305369
Alignment:
TGRCCTKTGHCCKAB
----ATKTM------
```




Reverse complement motif Consensus sequence: TGRCCTKTGHCCK


## Dataset \#:

2
Motif ID:
Motif name:
Matching format of first motif:
Matching format of second motif:
Direction:
Position number:
Number of overlap:
Similarity score:

Alignment:
GGYGCTGTCCATGGTGCTGAA
----ATKTM------------

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC

Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA


```
Motif ID: 46
```


## Motif name:

Matching format of first motif:
Matching format of second motif:
Direction:
Position number:
Number of overlap:
Similarity score:

## 46

RORA_1
Reverse Complement
Original Motif
Forward
4

5
0.0336052

```
Alignment:
AWVDAGGTCA
---RARAT--
Original motif Consensus sequence: AWVDAGGTCA
```



```
Reverse complement motif Consensus sequence: TGACCTDVWT答1.0-7
```


## Dataset \#:

2
Motif ID:
Motif name:
Matching format of first motif:
Matching format of second motif:
Direction:
Position number:
Number of overlap:
Similarity score:
34
HNF4A
Original Motif
Original Motif
Backward
2
5
0.0367105

```
Alignment:
```

RGGBCAAAGKYCA
-------ATKTM-

Original motif Consensus sequence: RGGBCAAAGKYCA


Reverse complement motif Consensus sequence: TGMYCTTTGBCCK


Dataset \#: $1 \quad$ Motif ID: $6 \quad$ Motif name: Motif 6

Original motif Consensus sequence: CMGCRGC


Reverse complement motif Consensus sequence: GCKGCYG


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

| Dataset \#: | 2 |
| :--- | :--- |
| Motif ID: | 19 |
| Motif name: | REST |
| Matching format of first motif: | Original Motif |
| Matching format of second motif: | Original Motif |
| Direction: | Backward |
| Position number: | 13 |

```
Number of overlap: 7
Similarity score: 0.0205607
Alignment:
TTCAGCACCATGGACAGCKCC
--CMGCRGC------------
Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC
*)
```

Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA


```
Dataset #:
```

Dataset \#:
2
2
Motif ID:
Motif name:
Matching format of first motif:
Matching format of second motif:
Direction:
Position number:
Number of overlap:
Similarity score:
Alignment:
GCGGACGTTV
GCKGCYG---
Original motif Consensus sequence: BAACGTCCGC
Reverse complement motif Consensus sequence: GCGGACGTTV

```


\section*{Motif name:}

Matching format of first motif:
Matching format of second motif:
Direction:
Position number:
Number of overlap:
Similarity score:

\section*{TFAP2A}

Original Motif
Reverse Complement
Forward
3
7
0.0393168
```

Alignment:
SCMVBBGGC
--CMGCRGC

```

Original motif Consensus sequence: GCCBBVRGS


Reverse complement motif Consensus sequence: SCMVBBGGC


2
45
Pax5
Reverse Complement
Reverse Complement
Backward
7
7
0.0448462

Alignment:
MSGKKRCGCWDCABTGBBCD
--------GCKGCYG------

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR


Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD

\begin{tabular}{ll} 
Dataset \#: & 2 \\
Motif ID: & 28 \\
Motif name: & Egr1 \\
Matching format of first motif: & Reverse Complement \\
Matching format of second motif: & Original Motif \\
Direction: & Backward \\
Position number: & 2 \\
Number of overlap: & 7 \\
Similarity score: & 0.0453576 \\
Alignment: & \\
HGCGTGGGCGK & \\
---GCKGCYG- & \\
Original motif \(\quad\) Consensus sequence: HGCGTGGGCGK
\end{tabular}

```

Motif name: SP1
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction:
Forward
Position number:1

```
Number of overlap: ..... 7
Similarity score:
```0.0490991
```

Alignment:
GGGGGYGGGG

```
GCKGCYG---
```

Original motif Consensus sequence: CCCCKCCCCC
(2.0)

Reverse complement motif Consensus sequence: GGGGGYGGGG


## Dataset \#:

2
Motif ID:
Motif name:
Matching format of first motif:
Matching format of second motif:
Direction:
Position number:
Number of overlap:
Similarity score:
7
0.0498726

Alignment:
BGRRRGRGGRTGRTTYGGGG
------GCKGCYG---------

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV


Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG


| Dataset \#: | 2 |
| :--- | :--- |
| Motif ID: | 35 |
| Motif name: | INSM1 |
| Matching format of first motif: | Original Motif |
| Matching format of second motif: | Reverse Complement |
| Direction: | Backward |
| Position number: | 3 |
| Number of overlap: | 7 |
| Similarity score: | 0.0511926 |
| Alignment: |  |
| MGCCCCCTGMCA |  |
| ---CMGCRGC-- |  |
|  |  |
| Original motif Consensus sequence: TGYCAGGGGGCR |  |




```
Dataset #: 2
Motif ID: 18
Motif name: RREB1
Matching format of first motif:
Matching format of second motif:
Direction:
Original Motif
Reverse Complement
Backward
Position number: 1
Number of overlap: 6
Similarity score:
0.0509122
```

Alignment:
BGRRRGRGGRTGRTTYGGGG
--------------CTGGGA

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV


Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG


## Dataset \#:

## 2

Motif ID: 35
Motif name:
Matching format of first motif:
Matching format of second motif:
Direction:
Position number:
INSM1
Original Motif
Original Motif
Forward
4


|  |  |
| :---: | :---: |
| Dataset \#: 2 |  |
| Motif ID: 43 |  |
| Motif name: NR1H2RXRA |  |
| Matching format of first motif: Reverse Complement |  |
| Matching format of second motif: Original Motif |  |
| Direction: Backward |  |
| Position number: 7 |  |
| Number of overlap: 6 |  |
| Similarity score: 0.0650784 |  |
| Alignment: |  |
| AAAGGTCAAAGGTCAAC |  |
| Original motif Consensus sequence: AAAGGTCAAAGGTCAAC | Reverse complement motif Consensus sequence: GTTGACCTTTGACCTTT |
|  |  |
| Dataset \#: 2 |  |

```
Motif ID: 48
Motif name:
Matching format of first motif:
Matching format of second motif:
Direction:
Tcfcp2l1
Original Motif
Reverse Complement
Backward
Position number:
9
Number of overlap: 6
Similarity score:
0.0663804
Alignment:
CKGGDTBDMMCTGG
CTGGGA--------
```

Original motif Consensus sequence: CCAGYYHVADCCRG


Reverse complement motif Consensus sequence: CKGGDTBDMMCT


## Dataset \#:

2
Motif ID:
Motif name:
Matching format of first motif:
Matching format of second motif:
Direction:
Position number:
Number of overlap:
Similarity score: 0.0678562

Alignment:
YCGCCCACGCH
--TCCCAG---

Original motif Consensus sequence: HGCGTGGGCGK


Reverse complement motif Consensus sequence: YCGCCCACGCH


Dataset \#: 2
Motif ID:
24
Motif name:
Matching format of first motif:
Matching format of second motif:
Direction:
Ar
Reverse Complement
Original Motif
Backward
Position number:
3
Number of overlap:
6
Similarity score:
0.0714107

Alignment:
HWDAGHACRHHVTGTHCCHVMV
--------------TCCCAG--

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV

Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH



Reverse complement motif Consensus sequence: TGTRT


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

## Dataset \#:

2
Motif ID:
Motif name:
Matching format of first motif:
Matching format of second motif:
Direction:
Position number:
Number of overlap:
Similarity score:
18
RREB1
Original Motif
Original Motif
Backward
11
5
0.0243918

## Alignment:

CCCCMAAMCAMCCMCMMMCV
------AMACA----------

Original moti
Consensus sequence: CCCCMAAMCAMCCMCMMMCV


Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG


| Dataset \#: | 2 |
| :--- | :--- |
| Motif ID: | 24 |
| Motif name: | Ar |
| Matching format of first motif: | Original Motif |
| Matching format of second motif: | Original Motif |
| Direction: | Backward |
| Position number: | 14 |
| Number of overlap: | 5 |
| Similarity score: | 0.0429089 |

## Alignment:

HWDAGHACRHHVTGTHCCHVMV
----AMACA--------------

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV


Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH


## Dataset \#:

## 2

Motif ID:
Motif name:
Matching format of first motif:
Matching format of second motif:
Direction:
Position number:

PPARGRXRA
Reverse Complement
Reverse Complement
Backward
6



```
Motif ID: 22
Motif name: NR2F1
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction:
Backward
Position number: 4
Number of overlap: 5
Similarity score:
0.0650242
Alignment:
AKGYYCAAAGRTCA
------AMACA---
Original motif Consensus sequence: TGAMCTTTGMMCYT
```



Reverse complement motif Consensus sequence: AKGYYCAAAGRTC A

## Dataset \#:

2
Motif ID:
Motif name:
Matching format of first motif:
Matching format of second motif:
Direction:
Position number:
Number of overlap:
Similarity score: 0.0670984

Alignment:
TGYCAGGGGGCR
TGTRT-------

Original motif Consensus sequence: TGYCAGGGGGCR


Reverse complement motif Consensus sequence: MGCCCCCTGMCA (2.0)

Dataset \#: 2
Motif ID:
Motif name:
Matching format of first motif:
Matching format of second motif:
Direction:
Position number:
Number of overlap:
Similarity score:
0.0700905

Alignment:
VCACGTBV
AMACA---

Original motif
Consensus sequence: VBACGTGV
Reverse complement motif
Consensus sequence: VCACGTBV



```
Dataset #: 2
Motif ID: 32
Motif name: EWSR1-FLI1
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction:
Position number: 8
Number of overlap: 7
Similarity score: 0.0395671
```

Alignment:
GGAAGGAAGGAAGGAAGG
-------AGSCWGG----

Original motif Consensus sequence: GGAAGGAAGGAAGGAAGG


Reverse complement motif Consensus sequence: ССТTССТTССТTССТTСС


## Dataset \#:

Motif ID:
Motif name:
Matching format of first motif:
Matching format of second motif:
Direction:
Position number:

## 2

35
INSM1
Reverse Complement
Reverse Complement
Backward
1

| Number of overlap: |
| :--- | :--- |
| Similarity score: |
| Alignment: |
| MGCCCCCTGMCA |
| $-----C C W G S C T ~$ |



```
Motif ID: 16
Motif name: SP1
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction:
Backward
Position number: 3
Number of overlap: 7
Similarity score:
0.0695377
Alignment:
CCCCKCCCCC
-CCWGSCT--
```

Original motif Consensus sequence: CCCCKCCCCC
躬

Reverse complement motif Consensus sequence: GGGGGYGGGG


## Dataset \#:

2
Motif ID:
12
Motif name:
Matching format of first motif:
Matching format of second motif:
Direction:
Position number:
Number of overlap:
Similarity score:
7

Alignment:
BBVGCCBVGGCCTV
------CCWGSCT-

Original motif Consensus sequence: BBVGCCBVGGCCTV


Reverse complement motif Consensus sequence: VAGGCCBBGGCVE


Dataset \#: 2
Motif ID:
Motif name:
Matching format of first motif:
Matching format of second motif:
Direction:
Position number:
Number of overlap:
Similarity score:
0.0771405

Alignment:
MGGTCAGGGTGACCTRDBHV
-------------CCWGSCT-

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY
Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV




```
Number of overlap: 6
Similarity score:
0.0146511
Alignment:
GGAAGGAAGGAAGGAAGG
-----------RGGAAR-
```


## Original motif Consensus sequence: GGAAGGAAGGAAGGAAGG



Reverse complement motif Consensus sequence:
ССТTССТТССТТССТТСС


```
\begin{tabular}{ll} 
Dataset \#: & 2 \\
Motif ID: & 37 \\
Motif name: & MIZF \\
Matching format of first motif: & Reverse Complement \\
Matching format of second motif: & Original Motif \\
Direction: & Forward \\
Position number: & 4 \\
Number of overlap: & 6 \\
Similarity score: & 0.0608243 \\
Alignment: & \\
BAACGTCCGC & \\
---MTTCCK- & \\
Original motif \(\quad\) Consensus sequence: BAACGTCCGC
\end{tabular}


Motif name:
Matching format of first motif:
Matching format of second motif:
Direction:
Position number:
Number of overlap:
Similarity score:

\section*{NFKB1}

Original Motif
Reverse Complement
Forward
2

6
0.0757695
```

Alignment:
GGGGAAKCCCC
-RGGAAR----

```

Original motif Consensus sequence: GGGGRTTCCCC
躬

Reverse complement motif Consensus sequence: GGGGAAKCCCC告

\section*{Dataset \#:}

Motif ID:
Motif name:
Matching format of first motif:
Matching format of second motif:
Direction:
Position number:
Number of overlap:
Similarity score:

2
20
PPARGRXRA
Original Motif
Original Motif
Backward
7
6
0.0800484

Alignment:
BTRGGDCARAGGKCA
---RGGAAR------

Original motif Consensus sequence: BTRGGDCARAGGKCA


Reverse complement motif Consensus sequence: TGRCCTKTGHCCK


Dataset \#: 2
Motif ID:
19
Motif name:
Matching format of first motif:
Matching format of second motif:
Direction:
Position number:
Number of overlap:
Similarity score:

Alignment:
TTCAGCACCATGGACAGCKCC
-----------RGGAAR-----

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC

Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA


Dataset \#:
Motif ID:
Motif name:
Matching format o
Matching format o
Direction:
Position number:
Number of overlap:
Similarity score:
Alignment:
TGYCAGGGGGCR
----- RGGAAR

Original motif Consensus sequence: TGYCAGGGGGCR


Reverse complement motif Consensus sequence: MGCCCCCTGMCA


Dataset \#:
2
Motif ID:
18
```

Motif name: RREB1

```

Matching format of first motif:
Matching format of second motif:
Direction:
Position number:
Number of overlap:
Similarity score:
Alignment:
BGRRRGRGGRTGRTTYGGGG
----RGGAAR----------

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV


Dataset \#:
2
Motif ID:
24
Motif name: Ar
Matching format of first motif:
Matching format of second motif:
Direction:
Position number:
Number of overlap:
Similarity score:
Original Motif
Original Motif
Forward
4
6
0.0836451


Alignment:
HWDAGHACRHHVTGTHCCHVMV
---RGGAAR--------------

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV


Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH

\begin{tabular}{ll} 
Dataset \#: & 2 \\
Motif ID: & 27 \\
Motif name: & E2F1 \\
Matching format of first motif: & Original Motif \\
Matching format of second motif: & Reverse Complement \\
Direction: & Backward \\
Position number: & 1 \\
Number of overlap: & 6 \\
Similarity score: & 0.0842331 \\
Alignment: & \\
GCGCSAAA & \\
--RGGAAR & \\
Original motif \(\quad\) Consensus sequence: TTTSGCGC
\end{tabular}


\section*{Original motif Consensus sequence: CCCRCCCC \\ CCC \({ }^{-1}\) CCC}

\section*{Reverse complement motif Consensus sequence: GGGGMGGG}


\section*{Best Matches for Top Significant Motif ID 7 (Highest to Lowest)}






Alignment:
GGAAGGAAGGAAGGAAGG
-------GGGGMGGG----

Original motif Consensus sequence: GGAAGGAAGGAAGGAAGG


Reverse complement motif Consensus sequence: ССТTССТTССТTССТTCC
\begin{tabular}{ll} 
Dataset \#: & 2 \\
Motif ID: & 21 \\
Motif name: & PLAG1 \\
Matching format of first motif: & Reverse Complement \\
Matching format of second motif: & Original Motif \\
Direction: & Forward \\
Position number: & 1 \\
Number of overlap: & 8 \\
Similarity score: & 0.0998932 \\
Alignment: & \\
\begin{tabular}{l} 
GGGGCCCAAGGGGG \\
GGGGMGGG------
\end{tabular} \\
\begin{tabular}{l} 
Original motif Consensus sequence: GGGGCCCAAGGGGG
\end{tabular}
\end{tabular}



\section*{Best Matches for Top Significant Motif ID 26 (Highest to Lowest)}

\section*{Dataset \#: \\ 1}

Motif ID: 11
Motif name:
Matching format of first motif:
Matching format of second motif:
Direction:
Motif 11
Original Motif
Reverse Complement
Forward
Position number: 7
Number of overlap: 6
Similarity score:
6
0.0308396

Alignment:
TGTGTGTGTGTKTG
-------YGCGTG--

Original motif Consensus sequence: CAYACACACACACA
(

Reverse complement motif Consensus sequence: TGTGTGTGTGTKT


Dataset \#:
Motif ID:
Motif name:
Matching format of first motif:
Matching format of second motif:

1
9
Motif 9
Reverse Complement
Original Motif
\begin{tabular}{ll} 
Direction: & Ba \\
Position number: & 1
\end{tabular}
Number of overlap: 6
Similarity score:
0.0350575
Alignment:
CACACAVRCACACA
---------CACGCM

Original motif Consensus sequence: CACACAVRCACACA
?

Reverse complement motif Consensus sequence: TGTGTGKVTGTGT


Dataset \#:
1
Motif ID:
Motif name:
Matching format of first motif:
Matching format of second motif:
Direction:
Position number:
Number of overlap:
Similarity score:
Alignment:
GGGGMGGG
YGCGTG--

Motif 7
Original Motif
Reverse Complement
Backward
3

6
0.0586538

\section*{Original motif Consensus sequence: CCCRCCCC \\ CCC \({ }^{-1 C C C}\)}

Dataset \#: 1
Motif ID:
Motif name:
Matching format of first motif:
Matching format of second motif:
Direction:
Position number:
Number of overlap:
Similarity score:

Alignment:
CCWGSCT
- CACGCM

\section*{Original motif Consensus sequence: AGSCWGG}


Reverse complement motif Consensus sequence: CCWGSCT


Reverse complement motif Consensus sequence: GGGGMGGG

0.0884818

Motif 3
Reverse Complement
Reverse Complement
Forward
2
6





\section*{Best Matches for Top Significant Motif ID 33 (Highest to Lowest)}

\section*{Dataset \#:}

1
Motif ID:
9
Motif name:
Matching format of first motif:
Matching format of second motif:
Direction:
Motif 9
Reverse Complement
Original Motif
Backward
Position number: 2
Number of overlap: 8
Similarity score:
0.0745994

\section*{Alignment:}

CACACAVRCACACA
-----VCACGTBV-

Original motif Consensus sequence: CACACAVRCACACA
告1.0

Reverse complement motif Consensus sequence: TGTGTGKVTGTGT

```

Dataset \#: 1
Motif ID: 11
Motif name: Motif 11
Matching format of first motif:
Matching format of second motif:
Direction:
Position number:
Number of overlap:
8
Similarity score:
0.0850889
Alignment:
CAYACACACACACA
---VCACGTBV---

```

Original motif Consensus sequence: CAYACACACACACA


Reverse complement motif Consensus sequence: TGTGTGTGTGTKT


\section*{Dataset \#:}

1
Motif ID:
Motif name:
Matching format of first motif:
Matching format of second motif:
Direction:
Position number:
Number of overlap:

Motif 7
Reverse Complement
Original Motif
Forward
2 7
Similarity score:
Alignment:
CCCRCCCC-
-VCACGTBV
Original motif Consensus sequence: CCCRCCCC
Dataset \#:
Motif ID:
Motif name:
Matching format of first motif:
Matching format of second motif:
Direction:
Position number:
Number of overlap:
Similarity score:
Alignment:
O-AGSCWG
\[
\text { 答 } 1.0-7
\]
\begin{tabular}{ll} 
Dataset \#: & 1 \\
Motif ID: & 2 \\
Motif name: & Motif 2 \\
Matching format of first motif: & Original Motif \\
Matching format of second motif: & Reverse Complement \\
Direction: & Forward \\
Position number: & 1 \\
Number of overlap: & 5 \\
Similarity score: & 1.57238
\end{tabular}

Alignment:
TGTRT---
VBACGTGV

Original motif Consensus sequence: AMACA


Reverse complement motif Consensus sequence: TGTRT


Results created by MOTIFSIM on 06-18-2018 23:13:48
Runtime: 761.535 seconds
MOTIFSIM is written by Ngoc Tam L. Tran
Motif logo generated by weblogo```

