MOTIFSIM - MOTIF SIMilarity Detection Tool

Version 2.1

INPUT

Input Parameters

Number of files:	4
Number of top significant motifs:	10
Number of best matches:	10
Similarity cutoff >=	0.75
Matching motif database:	UniProbe Mus Musculus
Phylogenetic tree:	Yes
Combined similar motifs:	Yes
Output file type:	All
Output file format:	All

Input files and motif counts

File name	Count of motifs	Dataset number
DREME_DM721.txt	16	1
MEME-ChIP_DM721.txt	11	2
PScanChIP_DM721.txt	37	3
RSAT_peak-motifs_DM721.txt	40	4

RESULTS

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

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

Original motif Consensus sequence: AMACA

Reverse complement motif Consensus sequence: TGTRT

Best Matches for Top Significant Motif ID 18 (Highest to Lowest)

Dataset #:	1
Motif ID:	2
Motif name:	Motif 2
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	5
Similarity score:	0

Alignment:

```
TGTGTGTG
TGTRT---
```

Original motif Consensus sequence: CACACACA

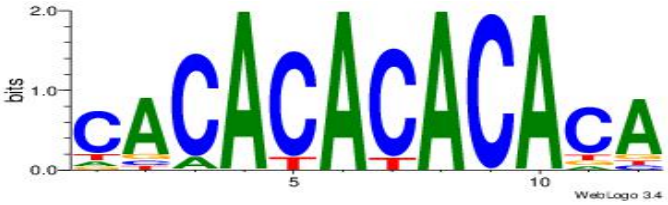
Reverse complement motif Consensus sequence: TGTGTGTG

Dataset #:	4
Motif ID:	79
Motif name:	CACACACACACA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	5
Similarity score:	0.0148279

Alignment:

```
TGTGTGTGTGTG
--TGTRT-----
```

Original motif Consensus sequence: CACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTG

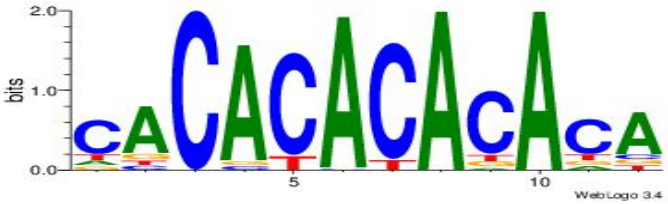
Dataset #:	4
Motif ID:	95

Motif name:	CACACACACACA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	5
Similarity score:	0.0228414

Alignment:

```
CACACACACACA
---AMACA----
```

Original motif Consensus sequence: CACACACACACA



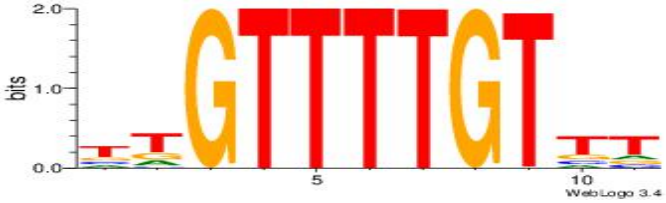
Reverse complement motif Consensus sequence: TGTGTGTGTGTG

Dataset #:	4
Motif ID:	69
Motif name:	aaACAAAACaa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	5
Similarity score:	0.0274014

Alignment:
AAACAAAACAA
-----AMACA-

Original motif Consensus sequence: AAACAAAACAA

Reverse complement motif Consensus sequence: TTGTTTTGTTT

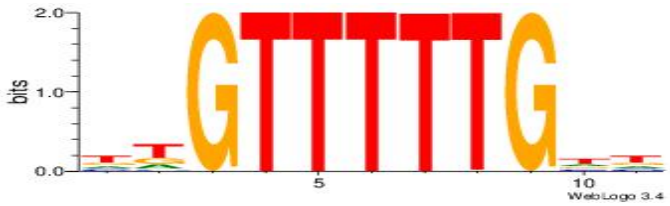


Dataset #:	4
Motif ID:	86
Motif name:	aaCAAAAACaa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	5
Similarity score:	0.0291354

Alignment:
HHCAAAAACAH
-----AMACA-

Original motif Consensus sequence: HHCAAAAACAH

Reverse complement motif Consensus sequence: HTGTTTTTGHH

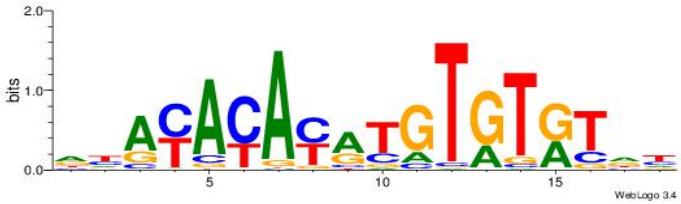


Dataset #:	4
Motif ID:	97
Motif name:	ryayAyAyrtGTRTrTry
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	5
Similarity score:	0.0293401

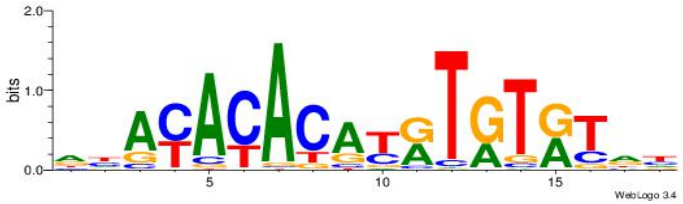
Alignment:

```
DHAYAYAYRTGTGTRTDH
---------TGTRT----
```

Original motif Consensus sequence: DHAYAYAYRTGTGTRTDH



Reverse complement motif Consensus sequence: HDAMACACAKKTKTKTHD



Dataset #: 4

Motif ID:	100
Motif name:	wrTGTATACAyw
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	5
Similarity score:	0.0302831

Alignment:

```
HDTGTATACAHD
--TGTRT-----
```

Original motif Consensus sequence: HDTGTATACAHD

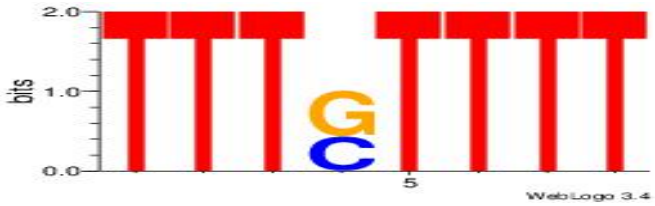
Reverse complement motif Consensus sequence: DHTGTATACADH

Dataset #:	1
Motif ID:	5
Motif name:	Motif 5
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	5
Similarity score:	0.0378142

Alignment:
AAAASAAA
-AMACA--

Original motif Consensus sequence: AAAASAAA

Reverse complement motif Consensus sequence: TTTSTTTT

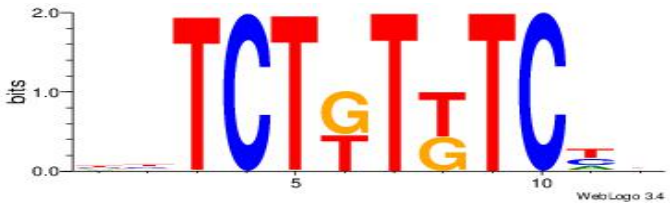


Dataset #:	4
Motif ID:	92
Motif name:	tyTCTkTkTCyy
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	5
Similarity score:	0.0390126

Alignment:
VHGARAYAGAVV
---AMACA----

Original motif Consensus sequence: BBTCTKTKTCHB

Reverse complement motif Consensus sequence: VHGARAYAGAVV



Dataset #:	1
Motif ID:	14
Motif name:	Motif 14
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	5
Similarity score:	0.042464

Alignment:

```
GKGTGKGC
-TGTRT--
```

Original motif Consensus sequence: GCRCACRC

Reverse complement motif Consensus sequence: GKGTGKGC

Dataset #: 3 Motif ID: 30 Motif name: ZEB1

Original motif Consensus sequence: CACCTD

Reverse complement motif Consensus sequence: HAGGTG

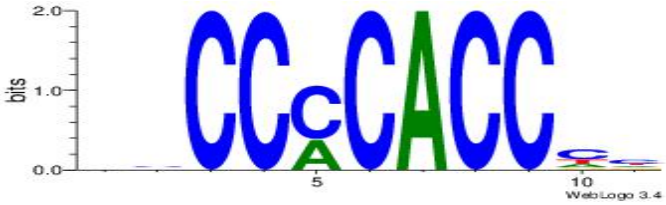
Best Matches for Top Significant Motif ID 30 (Highest to Lowest)

Dataset #:	4
Motif ID:	89
Motif name:	ccCCmCACCcc
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:	0.0148347

Alignment:

```
HBCCMCACCHH
-----CACCTD
```

Original motif Consensus sequence: HBCCMCACCHH



Reverse complement motif Consensus sequence: DDGGTGRGGBD

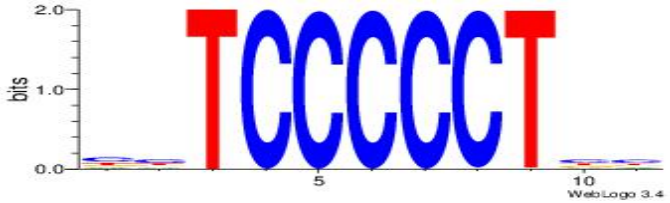
Dataset #:	4
Motif ID:	93
Motif name:	rrAGGGGGArr
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	6
Similarity score:	0.0194512

Alignment:

```
VVAGGGGGAVV
-HAGGTG----
```

Original motif Consensus sequence: VVAGGGGGAVV

Reverse complement motif Consensus sequence: VVTCCCCCTVV



Dataset #:	4
Motif ID:	75
Motif name:	yayAyAyACATrya
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	7
Number of overlap:	6

Similarity score: 0.0270731

Alignment:
HACAYAYACATRHD
------CACCTD--

Original motif Consensus sequence: HACAYAYACATRHD

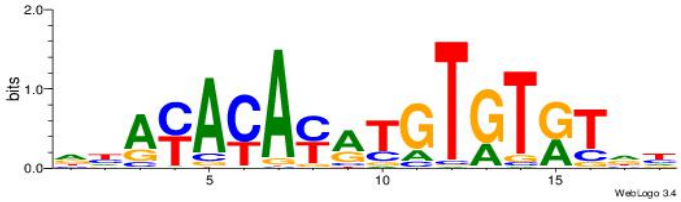
Reverse complement motif Consensus sequence: DHKATGTKTKTGT

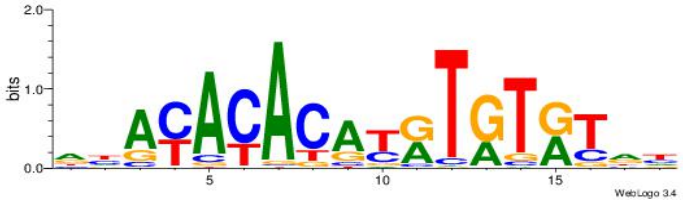
Dataset #: 4
Motif ID: 97
Motif name: ryayAyAyrtGTRTrTry
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 6
Number of overlap: 6
Similarity score: 0.0321302

Alignment:
HDAMACACAKKTKTKTHD
-----CACCTD-------

Original motif Consensus sequence: DHAYAYAYRTGTGTRTDH

Reverse complement motif Consensus sequence: HDAMACACAKKTKTKTHD



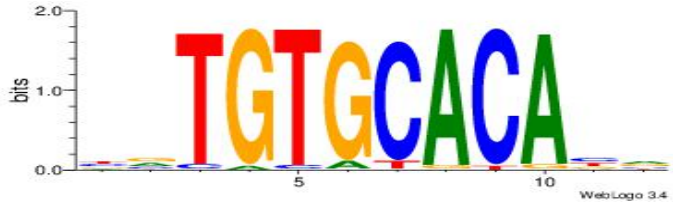


Dataset #:	4
Motif ID:	96
Motif name:	yrTGTGCACAyr
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	6
Similarity score:	0.0342918

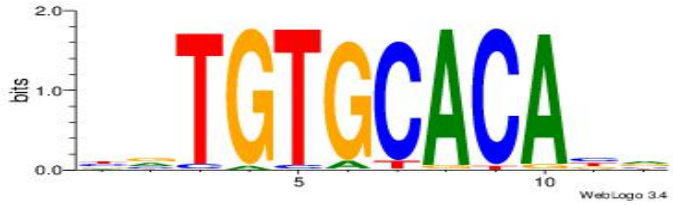
Alignment:

```
BVTGTGCACABV
HAGGTG------
```

Original motif Consensus sequence: BVTGTGCACABV



Reverse complement motif Consensus sequence: BBTGTGCACAVV



Dataset #:	4
Motif ID:	91

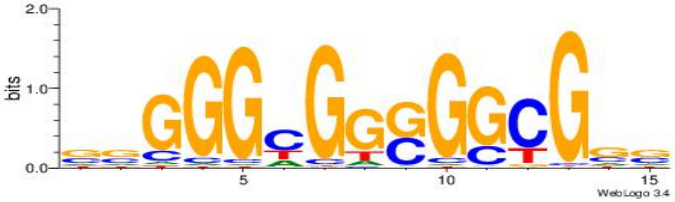
Motif name:	ssCGCCsCCrCCCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	9
Number of overlap:	6
Similarity score:	0.0456166

Alignment:

```
SSCGCCSCCGCCCSS
--------CACCTD-
```

Original motif Consensus sequence: SSCGCCSCCGCCCSS

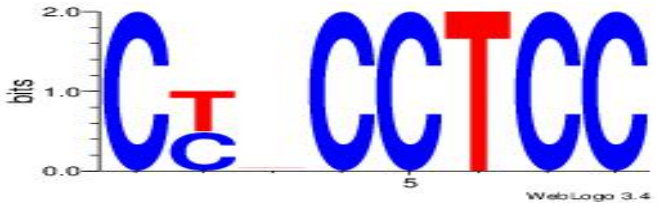
Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS



Dataset #:	1
Motif ID:	4
Motif name:	Motif 4
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	6
Similarity score:	0.0458702

Alignment:
CYBCCTCC
-CACCTD-

Original motif Consensus sequence: CYBCCTCC



Reverse complement motif Consensus sequence: GGAGGVMG

Dataset #:	4
Motif ID:	84
Motif name:	wsAGCTACwy
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	6
Similarity score:	0.0461351

Alignment:
VHGTAGCTVD
---CACCTD-

Original motif Consensus sequence: DVAGCTACHB

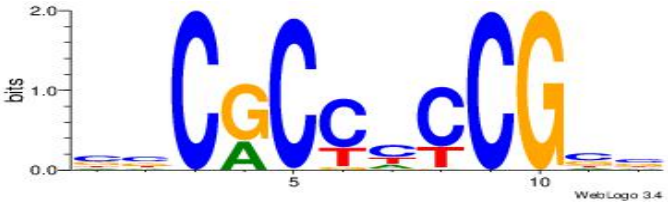
Reverse complement motif Consensus sequence: VHGTAGCTVD

Dataset #:	4
Motif ID:	88
Motif name:	ssCrCYyYCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	6
Similarity score:	0.0554152

Alignment:

```
BBCRCCYCCGBB
--CACCTD----
```

Original motif Consensus sequence: BBCRCCYCCGBB



Reverse complement motif Consensus sequence: BBCGGKGGMGBB

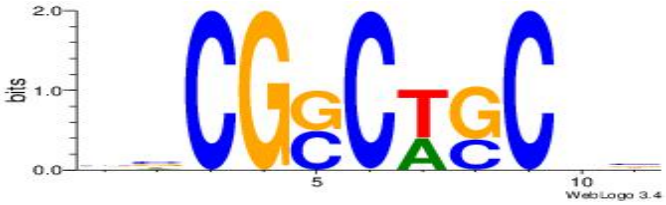
Dataset #:	4
Motif ID:	90

Motif name:	ssCGsCwsCss
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:	0.0564656

Alignment:

```
BBCGSCWSCBB
-----CACCTD
```

Original motif Consensus sequence: BBCGSCWSCBB



Reverse complement motif Consensus sequence: BBGSWGSCGBB

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

Original motif Consensus sequence: ASASAGAA

Reverse complement motif Consensus sequence: TTCTSTST

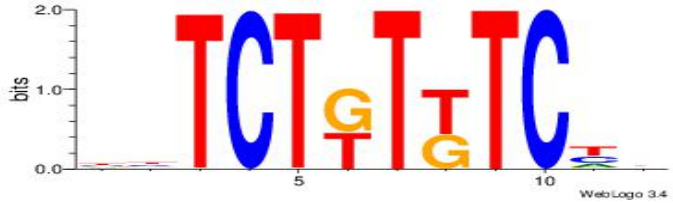
Best Matches for Top Significant Motif ID 7 (Highest to Lowest)

Dataset #:	4
Motif ID:	92
Motif name:	tyTCTkTkTCyy
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.00355249

Alignment:

```
BBTCTKTKTCHB
-TTCTSTST---
```

Original motif Consensus sequence: BBTCTKTKTCHB



Reverse complement motif Consensus sequence: VHGARAYAGAVV

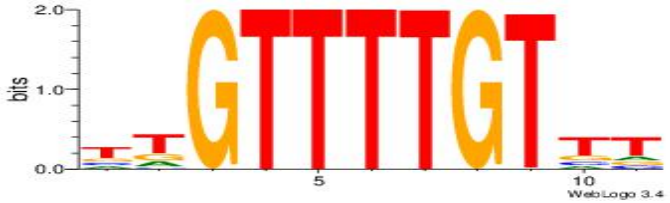
Dataset #:	4
Motif ID:	69
Motif name:	aaACAAAACaa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	8

Similarity score: 0.0313478

Alignment:
AAACAAAACAA
ASASAGAA---

Original motif Consensus sequence: AAACAAAACAA

Reverse complement motif Consensus sequence: TTGTTTTGTTT

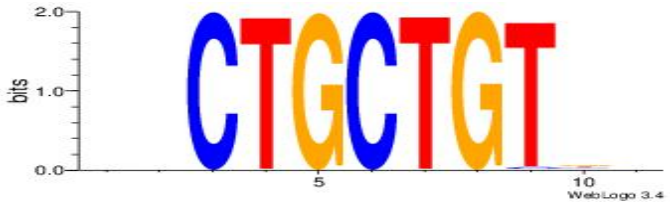


Dataset #: 4
Motif ID: 82
Motif name: rmACAGCAGsr
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 1
Number of overlap: 8
Similarity score: 0.0319191

Alignment:
DVCTGCTGTVB
---TTCTSTST

Original motif Consensus sequence: VVACAGCAGVD

Reverse complement motif Consensus sequence: DVCTGCTGTVB

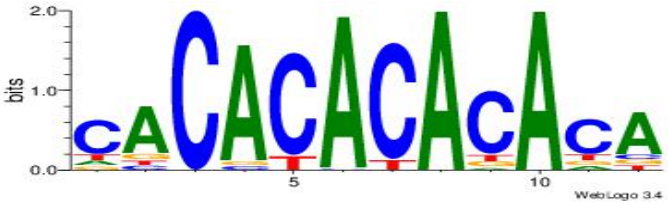


Dataset #:	4
Motif ID:	95
Motif name:	CACACACACACA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	8
Similarity score:	0.0398795

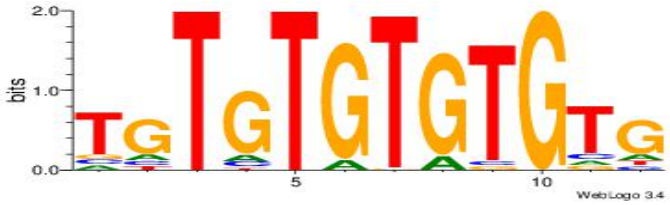
Alignment:

```
TGTGTGTGTGTG
-TTCTSTST---
```

Original motif Consensus sequence: CACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTG



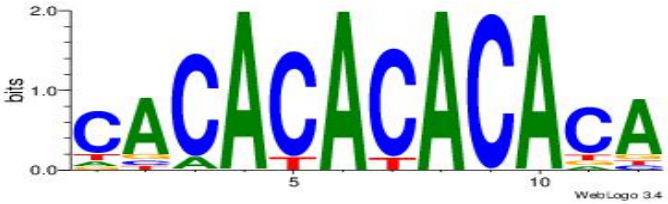
Dataset #:	4
Motif ID:	79

Motif name:	CACACACACACA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.0407034

Alignment:

```
TGTGTGTGTGTG
-TTCTSTST---
```

Original motif Consensus sequence: CACACACACACA

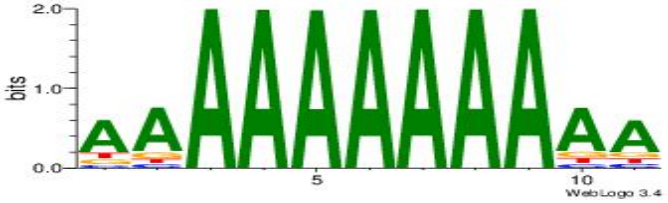


Reverse complement motif Consensus sequence: TGTGTGTGTGTG

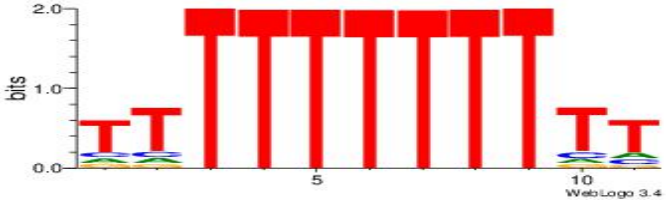
Dataset #:	4
Motif ID:	102
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	8
Similarity score:	0.0441956

Alignment:
AAAAAAAAAAA
ASASAGAA---

Original motif Consensus sequence: AAAAAAAAAAA



Reverse complement motif Consensus sequence: TTTTTTTTTTT

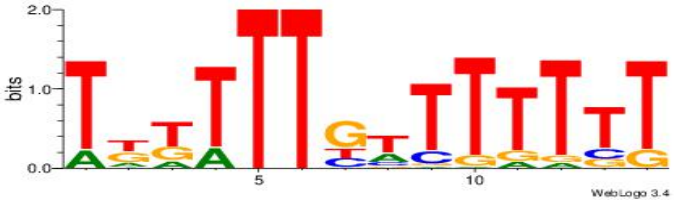


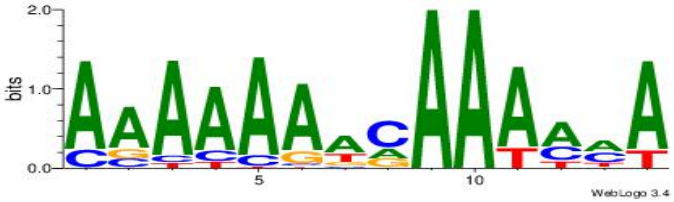
Dataset #:	2
Motif ID:	26
Motif name:	Motif 26
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	8
Similarity score:	0.0451851

Alignment:
AAAAAAACAAARRA
--ASASAGAA----

Original motif Consensus sequence: TKKTTTGTTTTTT

Reverse complement motif Consensus sequence: AAAAAAACAAARR



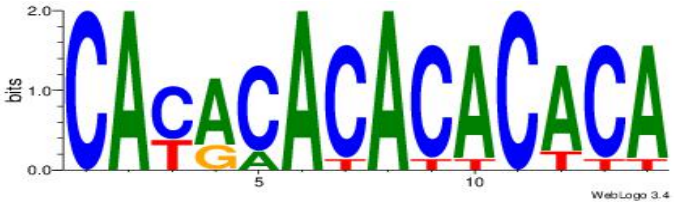


Dataset #:	2
Motif ID:	27
Motif name:	Motif 27
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	8
Similarity score:	0.0493389

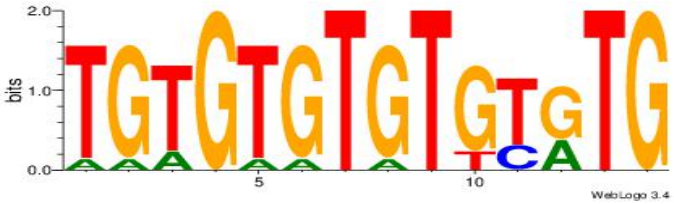
Alignment:

```
TGTGTGTGTGTKTG
-----TTCTSTST-
```

Original motif Consensus sequence: CAYACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTKT



Dataset #:	2
Motif ID:	25

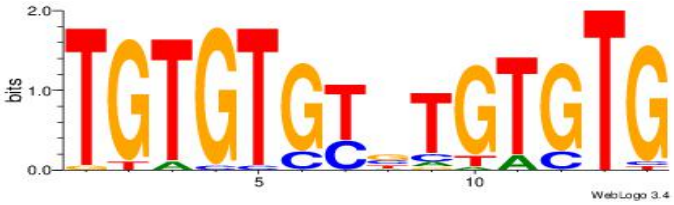
Motif name:	Motif 25
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	8
Similarity score:	0.0494079

Alignment:

```
CACACAVRCACACA
-----ASASAGAA-
```

Original motif Consensus sequence: CACACAVRCACACA

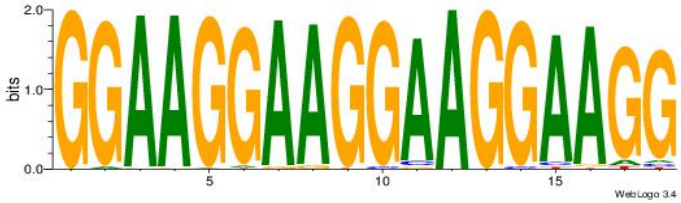
Reverse complement motif Consensus sequence: TGTGTGKVTGTGT



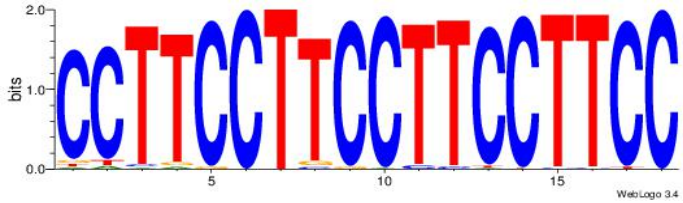
Dataset #:	3
Motif ID:	48
Motif name:	EWSR1-FLI1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8
Number of overlap:	8
Similarity score:	0.0559328

Alignment:
GGAAGGAAGGAAGGAAGG
-------ASASAGAA---

Original motif Consensus sequence: GGAAGGAAGGAAGGAAGG



Reverse complement motif Consensus sequence: CCTTCCTTCCTTCCTTCC



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

Original motif Consensus sequence: ATKTM

Reverse complement motif Consensus sequence: RARAT

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

Dataset #:	1
Motif ID:	15
Motif name:	Motif 15
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward

Position number:	2
Number of overlap:	5
Similarity score:	0.0065927

Alignment:
CATTTKC
-ATKTM-

Original motif Consensus sequence: GRAAATG

Reverse complement motif Consensus sequence: CATTTKC

Dataset #:	1
Motif ID:	10
Motif name:	Motif 10
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	5
Similarity score:	0.0217628

Alignment:
TAMATA
-RARAT

Original motif Consensus sequence: TAMATA

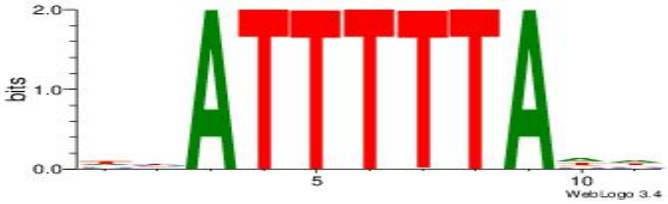
Reverse complement motif Consensus sequence: TATRTA

Dataset #:	4
Motif ID:	85
Motif name:	wtATTTTTAww
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	5
Similarity score:	0.0314602

Alignment:

```
DDTAAAAATHD
----RARAT--
```

Original motif Consensus sequence: DHATTTTTADD



Reverse complement motif Consensus sequence: DDTAAAAATHD

Dataset #:	4

Motif ID:	71
Motif name:	wyATTTTAww
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	5
Similarity score:	0.0314958

Alignment:

```
DDTAAAATHD
---RARAT--
```

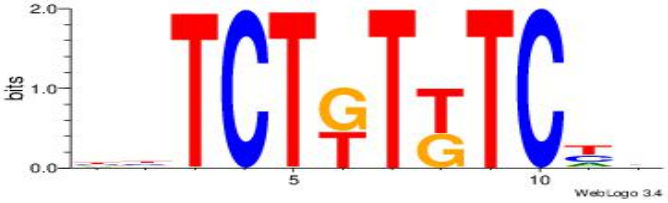
Original motif Consensus sequence: DHATTTTADD

Reverse complement motif Consensus sequence: DDTAAAATHD

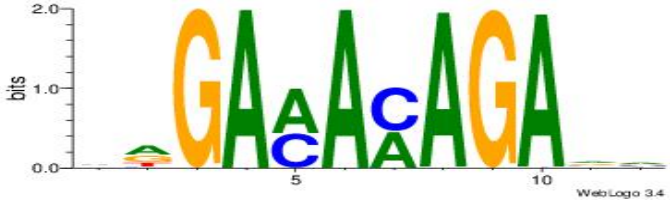
Dataset #:	4
Motif ID:	92
Motif name:	tyTCTkTkTCyy
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	5
Similarity score:	0.0326182

Alignment:
VHGARAYAGAVV
--RARAT-----

Original motif Consensus sequence: BBTCTKTKTCHB



Reverse complement motif Consensus sequence: VHGARAYAGAVV



Dataset #:	4
Motif ID:	74
Motif name:	twTACATAvw
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	5
Similarity score:	0.0335447

Alignment:
DBTATGTAHH
---ATKTM--

Original motif Consensus sequence: HHTACATAVD

Reverse complement motif Consensus sequence: DBTATGTAHH

Dataset #:	4
Motif ID:	83
Motif name:	wwTAAAwAww
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	5
Similarity score:	0.0514182

Alignment:

```
HHTWTTTADD
---ATKTM--
```

Original motif Consensus sequence: DDTAAAWAHH

Reverse complement motif Consensus sequence: HHTWTTTADD

Dataset #:	4
Motif ID:	76

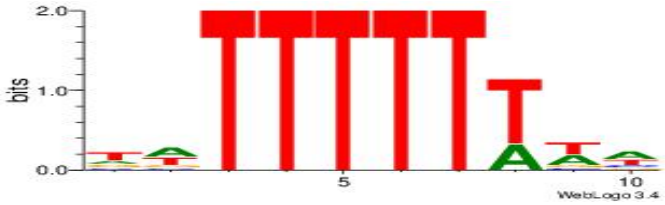
Motif name:	wwWAAAAAwa
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	5
Similarity score:	0.0597589

Alignment:

```
WWAAAAAAWH
----RARAT-
```

Original motif Consensus sequence: WWAAAAAAWH

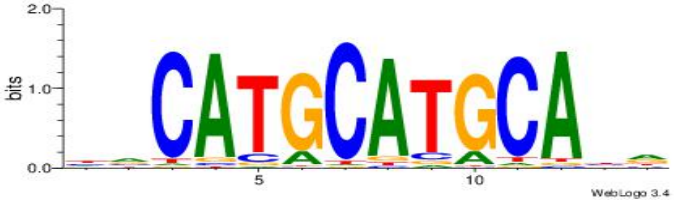
Reverse complement motif Consensus sequence: HWTTTTTTWW



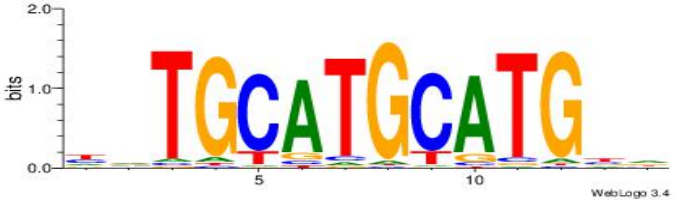
Dataset #:	4
Motif ID:	101
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	10
Number of overlap:	5
Similarity score:	0.0609742

Alignment:
DVTGCATGCATGBH
---------ATKTM

Original motif Consensus sequence: HVCATGCATGCABD



Reverse complement motif Consensus sequence: DVTGCATGCATGB



Dataset #:	4
Motif ID:	100
Motif name:	wrTGTATACAyw
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	5
Similarity score:	0.0620607

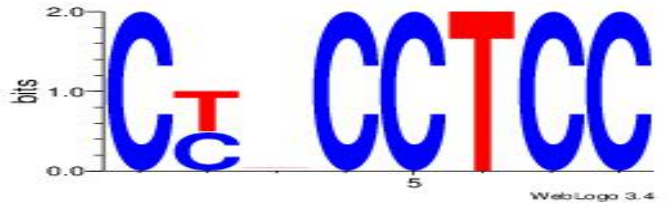
Alignment:
DHTGTATACADH
-ATKTM------

Original motif Consensus sequence: HDTGTATACAHD

Reverse complement motif Consensus sequence: DHTGTATACADH

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

Original motif Consensus sequence: CYBCCTCC



Reverse complement motif Consensus sequence: GGAGGVMG

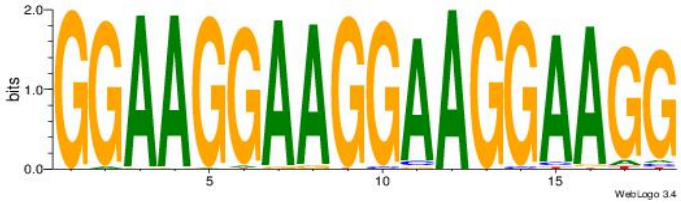
Best Matches for Top Significant Motif ID 4 (Highest to Lowest)

Dataset #:	3
Motif ID:	48
Motif name:	EWSR1-FLI1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	8
Similarity score:	0.022644

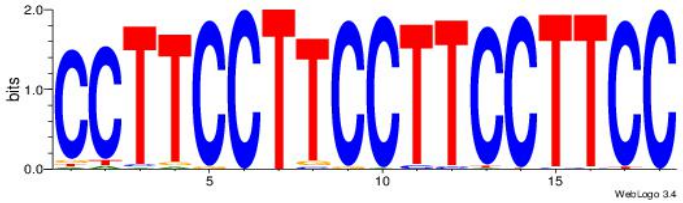
Alignment:

```
GGAAGGAAGGAAGGAAGG
-----GGAGGVMG-----
```

Original motif Consensus sequence: GGAAGGAAGGAAGGAAGG



Reverse complement motif Consensus sequence: CCTTCCTTCCTTCCTTCC

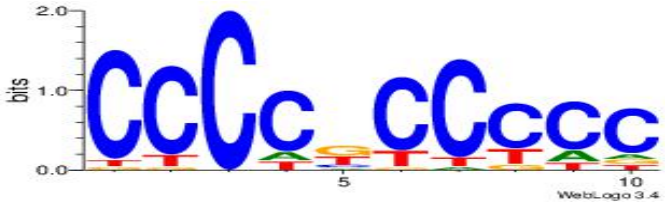


Dataset #:	3
Motif ID:	32
Motif name:	SP1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	8
Similarity score:	0.0247246

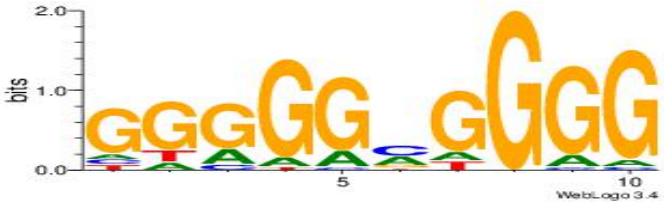
Alignment:

```
CCCCKCCCCC
--CYBCCTCC
```

Original motif Consensus sequence: CCCCKCCCCC



Reverse complement motif Consensus sequence: GGGGGYGGGG



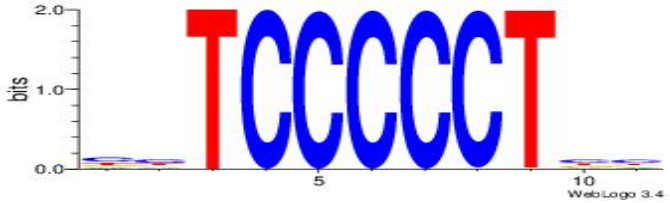
Dataset #:	4
Motif ID:	93
Motif name:	rrAGGGGGArr
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	8
Similarity score:	0.0300296

Alignment:

```
VVTCCCCCTVV
---CYBCCTCC
```

Original motif Consensus sequence: VVAGGGGGAVV

Reverse complement motif Consensus sequence: VVTCCCCCTVV



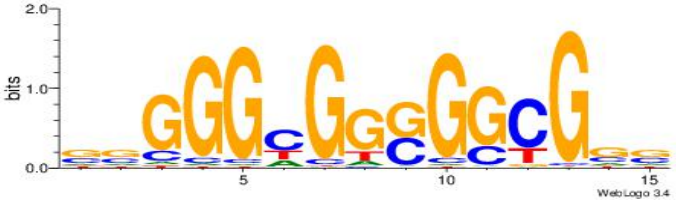
Dataset #:	4
Motif ID:	91
Motif name:	ssCGCCsCCrCCCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	8

Similarity score: 0.0335629

Alignment:
SSCGCCSCCGCCCSS
----CYBCCTCC---

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS

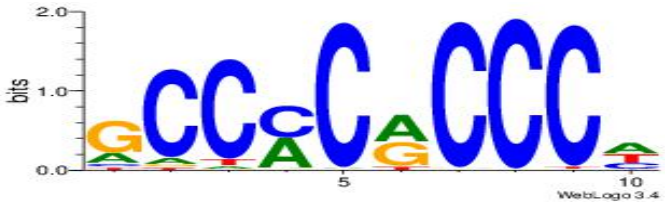


Dataset #: 3
Motif ID: 52
Motif name: Klf4
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 2
Number of overlap: 8
Similarity score: 0.0354458

Alignment:
GCCYCMCCCD
-CYBCCTCC-

Original motif Consensus sequence: DGGGYGKGGC

Reverse complement motif Consensus sequence: GCCYCMCCCD

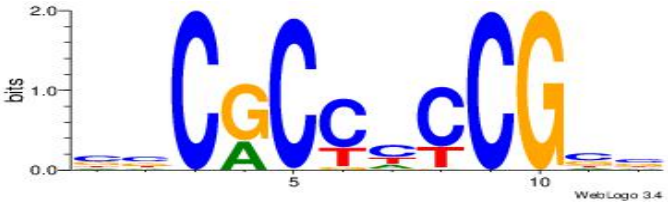


Dataset #:	4
Motif ID:	88
Motif name:	ssCrCYyYCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	8
Similarity score:	0.045829

Alignment:

```
BBCRCCYCCGBB
----CYBCCTCC
```

Original motif Consensus sequence: BBCRCCYCCGBB



Reverse complement motif Consensus sequence: BBCGGKGGMGBB

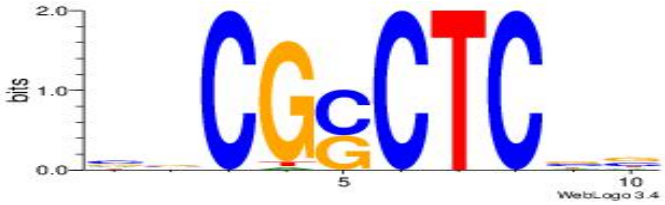
Dataset #:	4
Motif ID:	73

Motif name:	ssCGsCTCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	8
Similarity score:	0.0472644

Alignment:

```
VVCGSCTCBB
-CYBCCTCC-
```

Original motif Consensus sequence: VVCGSCTCBB



Reverse complement motif Consensus sequence: BBGAGSCGVV

Dataset #:	3
Motif ID:	57
Motif name:	MZF1_5-13
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	8
Similarity score:	0.049303

Alignment:
BTHCCCCTYB
--CYBCCTCC

Original motif Consensus sequence: BKAGGGGDAD

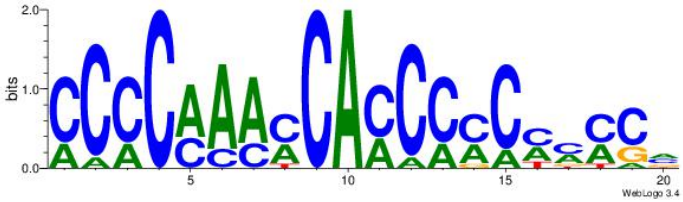
Reverse complement motif Consensus sequence: BTHCCCCTYB

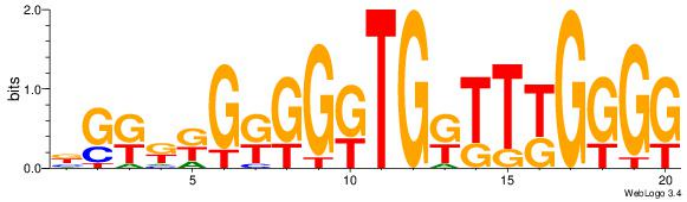
Dataset #:	3
Motif ID:	34
Motif name:	RREB1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	8
Similarity score:	0.0528666

Alignment:
BGRRRGRGGRTGRTTYGGGG
----GGAGGVMG--------

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV

Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG





Dataset #:	4
Motif ID:	89
Motif name:	ccCCmCACCcc
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	8
Similarity score:	0.0549805

Alignment:

```
HBCCMCACCHH
-CYBCCTCC--
```

Original motif Consensus sequence: HBCCMCACCHH

Reverse complement motif Consensus sequence: DDGGTGRGGBD

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

Original motif Consensus sequence: CACACACA

Reverse complement motif Consensus sequence: TGTGTGTG

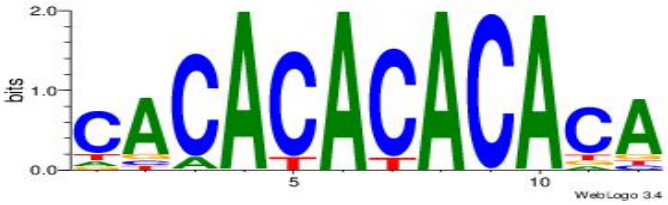
Best Matches for Top Significant Motif ID 2 (Highest to Lowest)

Dataset #:	4
Motif ID:	79
Motif name:	CACACACACACA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	8
Similarity score:	0.00486551

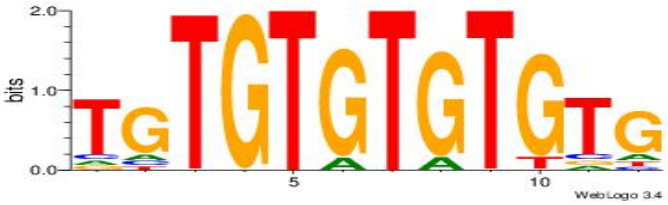
Alignment:

```
CACACACACACA
--CACACACA--
```

Original motif Consensus sequence: CACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTG

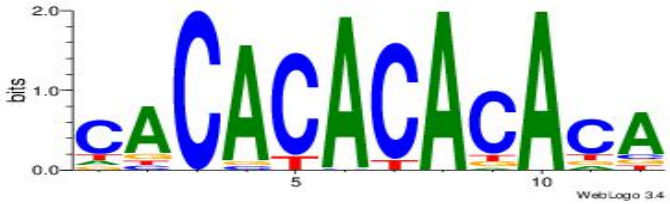


Dataset #:	4
Motif ID:	95
Motif name:	CACACACACACA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	8
Similarity score:	0.0100991

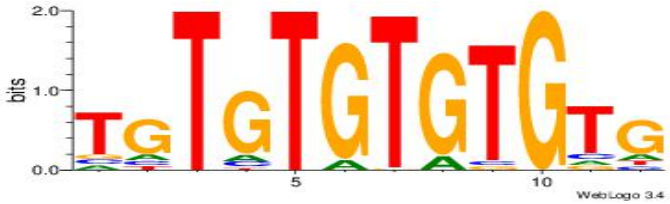
Alignment:

```
TGTGTGTGTGTG
----TGTGTGTG
```

Original motif Consensus sequence: CACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTG

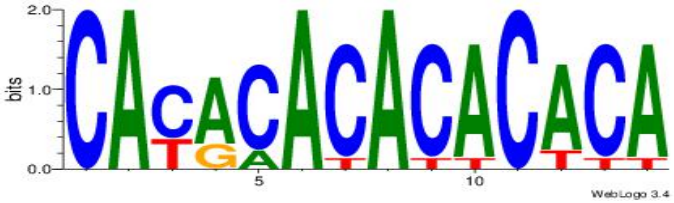


Dataset #:	2
Motif ID:	27
Motif name:	Motif 27
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	8

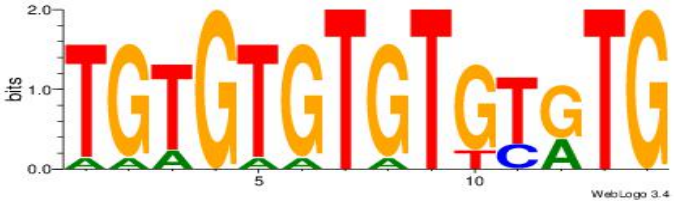
Similarity score: 0.0101254

Alignment:
CAYACACACACACA
----CACACACA--

Original motif Consensus sequence: CAYACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTKT

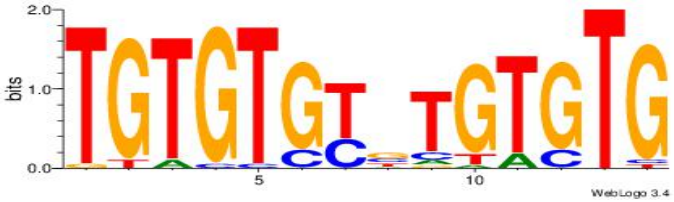


Dataset #: 2
Motif ID: 25
Motif name: Motif 25
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 7
Number of overlap: 8
Similarity score: 0.0226631

Alignment:
TGTGTGKVTGTGTG
TGTGTGTG------

Original motif Consensus sequence: CACACAVRCACACA

Reverse complement motif Consensus sequence: TGTGTGKVTGTGT

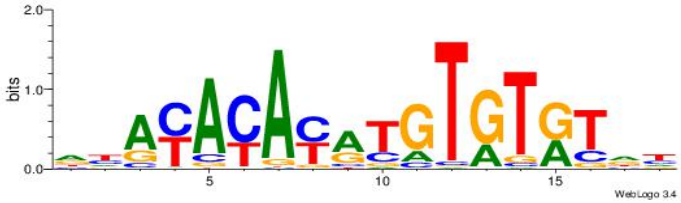


Dataset #:	4
Motif ID:	97
Motif name:	ryayAyAyrtGTRTrTry
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	10
Number of overlap:	8
Similarity score:	0.0393219

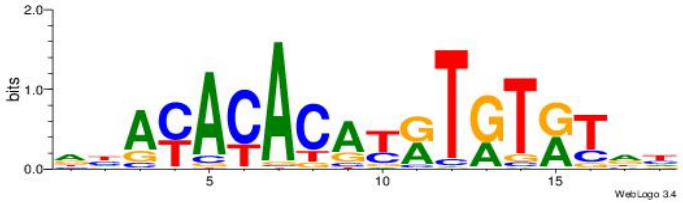
Alignment:

```
DHAYAYAYRTGTGTRTDH
---------TGTGTGTG-
```

Original motif Consensus sequence: DHAYAYAYRTGTGTRTDH



Reverse complement motif Consensus sequence: HDAMACACAKKTKTKTHD



Dataset #: 4

Motif ID:	75
Motif name:	yayAyAyACATrya
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	8
Similarity score:	0.0468047

Alignment:

```
HACAYAYACATRHD
--CACACACA----
```

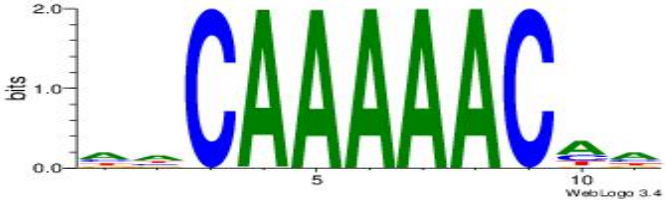
Original motif Consensus sequence: HACAYAYACATRHD

Reverse complement motif Consensus sequence: DHKATGTKTKTGT

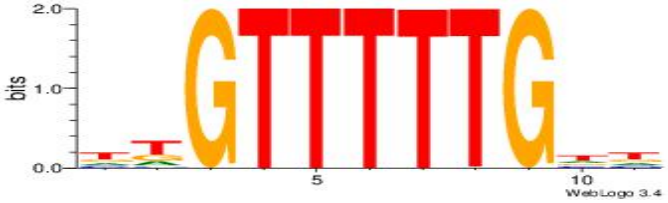
Dataset #:	4
Motif ID:	86
Motif name:	aaCAAAAACaa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	8
Similarity score:	0.0633924

Alignment:
HHCAAAAACAH
--CACACACA-

Original motif Consensus sequence: HHCAAAAACAH



Reverse complement motif Consensus sequence: HTGTTTTTGHH



Dataset #:	4
Motif ID:	74
Motif name:	twTACATAvw
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	8
Similarity score:	0.0691437

Alignment:
DBTATGTAHH
TGTGTGTG--

Original motif Consensus sequence: HHTACATAVD

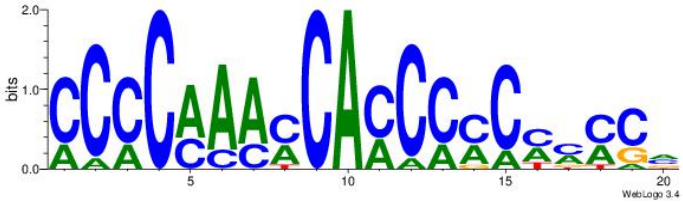
Reverse complement motif Consensus sequence: DBTATGTAHH

Dataset #:	3
Motif ID:	34
Motif name:	RREB1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	7
Number of overlap:	8
Similarity score:	0.0752394

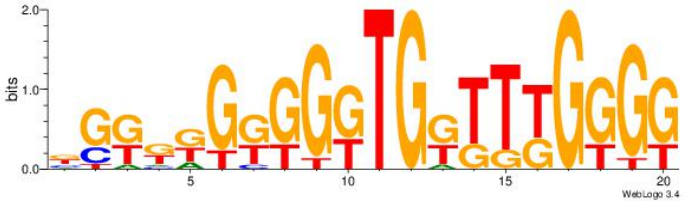
Alignment:

```
CCCCMAAMCAMCCMCMMMCV
------CACACACA------
```

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG



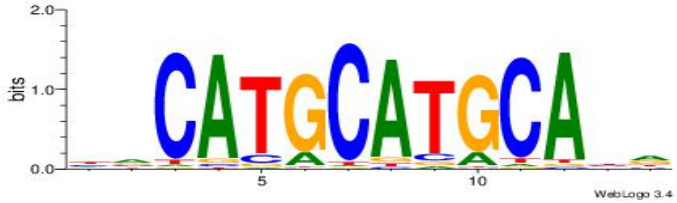
Dataset #: 4

Motif ID:	101
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	8
Similarity score:	0.0764586

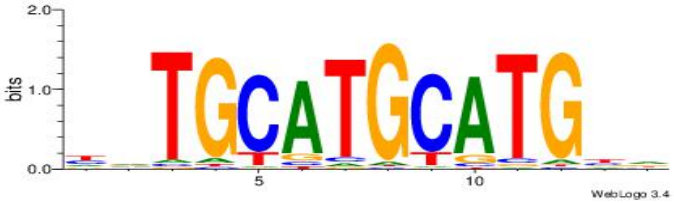
Alignment:

```
DVTGCATGCATGBH
------TGTGTGTG
```

Original motif Consensus sequence: HVCATGCATGCABD



Reverse complement motif Consensus sequence: DVTGCATGCATGB



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

Original motif Consensus sequence: CTCTGY

Reverse complement motif Consensus sequence: KCAGAG

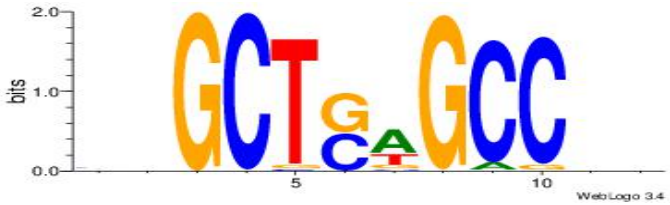
Best Matches for Top Significant Motif ID 20 (Highest to Lowest)

Dataset #:	4
Motif ID:	77
Motif name:	ssGCTswGCCms
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	6
Similarity score:	0.0323407

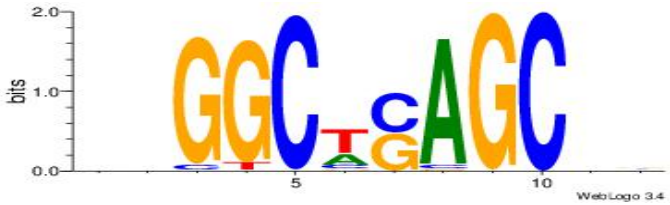
Alignment:

```
VBGCTSAGCCHB
---CTCTGY---
```

Original motif Consensus sequence: VBGCTSAGCCHB



Reverse complement motif Consensus sequence: BDGGCTSAGCBV



Dataset #:	1
Motif ID:	7
Motif name:	Motif 7
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif

Direction:	Forward
Position number:	3
Number of overlap:	6
Similarity score:	0.0352938

Alignment:

```
ASASAGAA
--KCAGAG
```

Original motif Consensus sequence: ASASAGAA

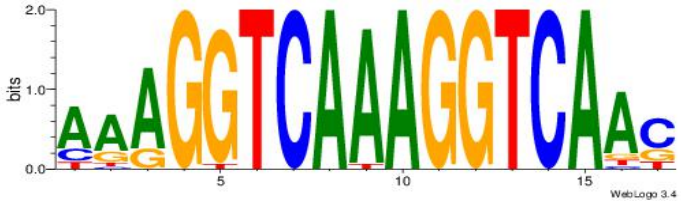
Reverse complement motif Consensus sequence: TTCTSTST

Dataset #:	3
Motif ID:	59
Motif name:	NR1H2RXRA
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:	0.0398495

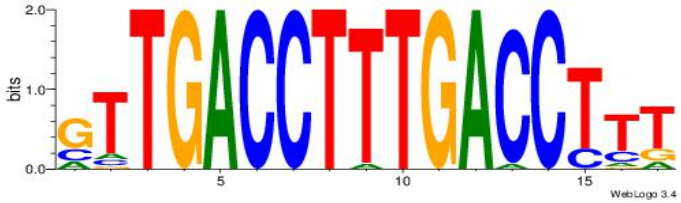
Alignment:

```
AAAGGTCAAAGGTCAAC
-----KCAGAG------
```

Original motif Consensus sequence: AAAGGTCAAAGGTCAAC



Reverse complement motif Consensus sequence: GTTGACCTTTGACCTTT

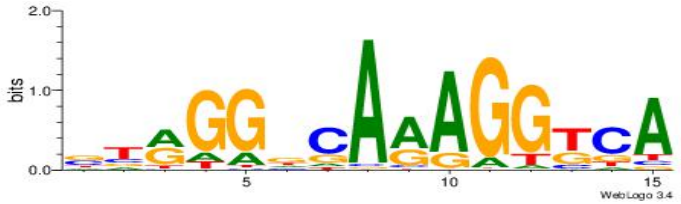


Dataset #:	3
Motif ID:	36
Motif name:	PPARGRXRA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	6
Similarity score:	0.0415907

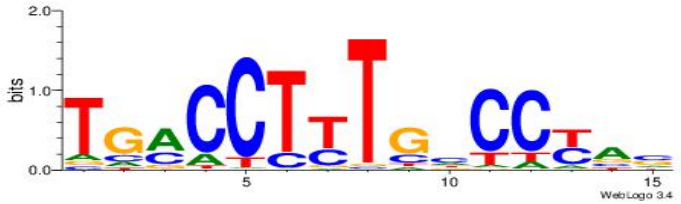
Alignment:

```
BTRGGDCARAGGKCA
-----KCAGAG----
```

Original motif Consensus sequence: BTRGGDCARAGGKCA



Reverse complement motif Consensus sequence: TGRCCTKTGHCCK



Dataset #:	1
Motif ID:	11
Motif name:	Motif 11
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	6
Similarity score:	0.0430865

Alignment:

```
CCGCCGCC
-CTCTGY-
```

Original motif Consensus sequence: CCGCCGCC

Reverse complement motif Consensus sequence: GGCGGCGG

Dataset #:	4
Motif ID:	72
Motif name:	ssCKCwsCGss
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: 0.0439226

Alignment:
BVCGCWSCGBV
----CTCTGY-

Original motif Consensus sequence: BVCGCWSCGBV

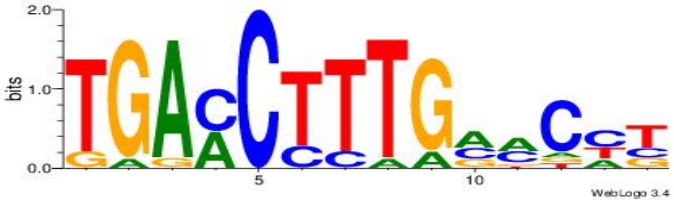
Reverse complement motif Consensus sequence: VBCGSWGCGVB

Dataset #: 3
Motif ID: 38
Motif name: NR2F1
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 5
Number of overlap: 6
Similarity score: 0.0462597

Alignment:
AKGYYCAAAGRTCA
----KCAGAG----

Original motif Consensus sequence: TGAMCTTTGMMCYT

Reverse complement motif Consensus sequence: AKGYYCAAAGRTCA

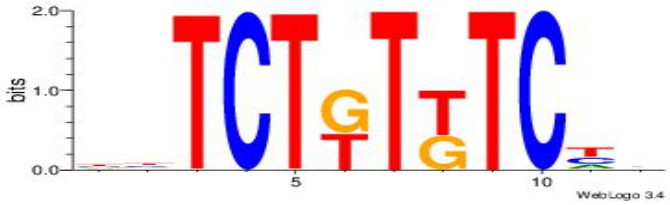


Dataset #:	4
Motif ID:	92
Motif name:	tyTCTkTkTCyy
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	6
Similarity score:	0.0467436

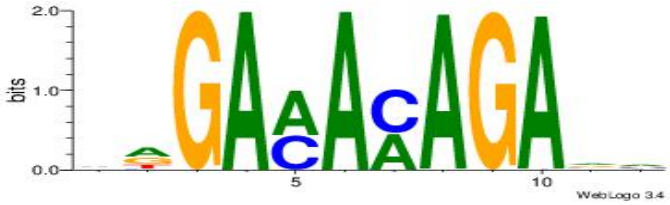
Alignment:

```
BBTCTKTKTCHB
-CTCTGY-----
```

Original motif Consensus sequence: BBTCTKTKTCHB



Reverse complement motif Consensus sequence: VHGARAYAGAVV



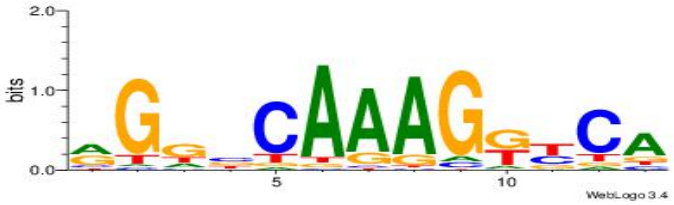
Dataset #:	3
Motif ID:	50

Motif name:	HNF4A
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:	0.0481824

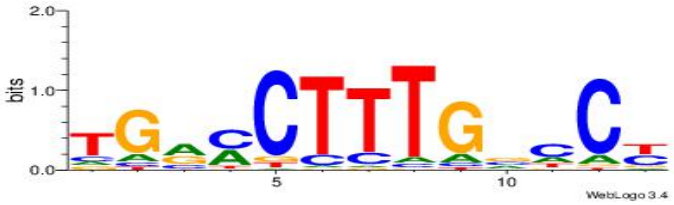
Alignment:

```
RGGBCAAAGKYCA
---KCAGAG----
```

Original motif Consensus sequence: RGGBCAAAGKYCA



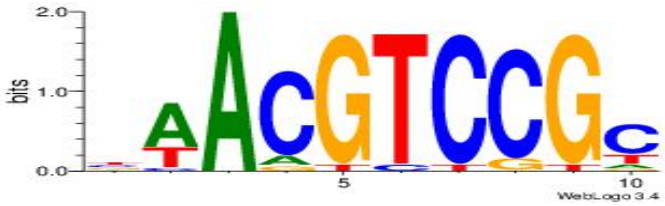
Reverse complement motif Consensus sequence: TGMYCTTTGBCCK



Dataset #:	3
Motif ID:	53
Motif name:	MIZF
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:	0.049747

Alignment:
BAACGTCCGC
----CTCTGY

Original motif Consensus sequence: BAACGTCCGC



Reverse complement motif Consensus sequence: GCGGACGTTV

Dataset #: 3 Motif ID: 42 Motif name: ArntAhr

Original motif Consensus sequence: YGCGTG

Reverse complement motif Consensus sequence: CACGCM

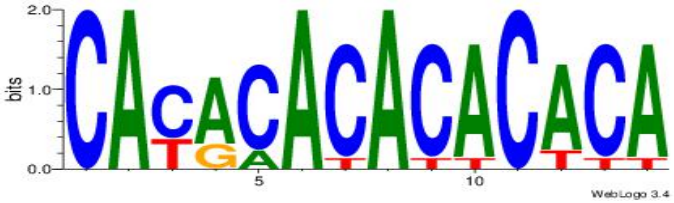
Best Matches for Top Significant Motif ID 42 (Highest to Lowest)

Dataset #:	2
Motif ID:	27
Motif name:	Motif 27
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7

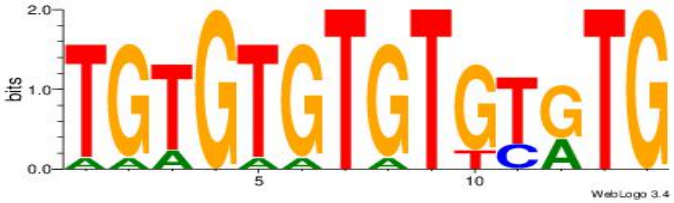
Number of overlap: 6
Similarity score: 0.0388571

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

Original motif Consensus sequence: CAYACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTKT

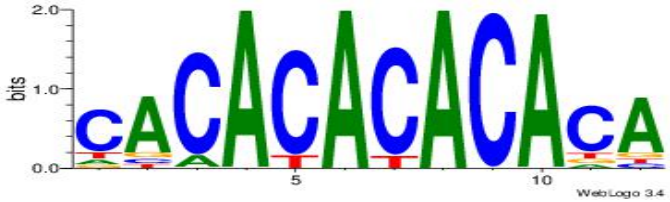


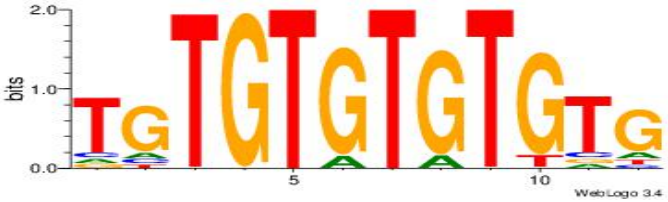
Dataset #: 4
Motif ID: 79
Motif name: CACACACACACA
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 7
Number of overlap: 6
Similarity score: 0.0420782

Alignment:
TGTGTGTGTGTG
YGCGTG------

Original motif Consensus sequence: CACACACACACA

Reverse complement motif Consensus sequence: TGTGTGTGTGTG





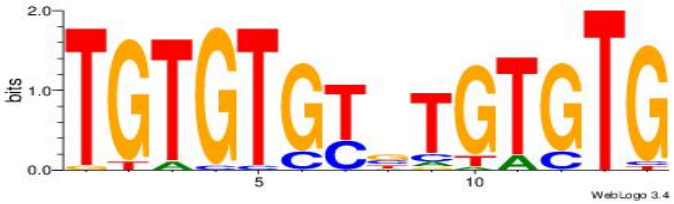
Dataset #:	2
Motif ID:	25
Motif name:	Motif 25
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	6
Similarity score:	0.0430749

Alignment:

```
TGTGTGKVTGTGTG
YGCGTG--------
```

Original motif Consensus sequence: CACACAVRCACACA

Reverse complement motif Consensus sequence: TGTGTGKVTGTGT



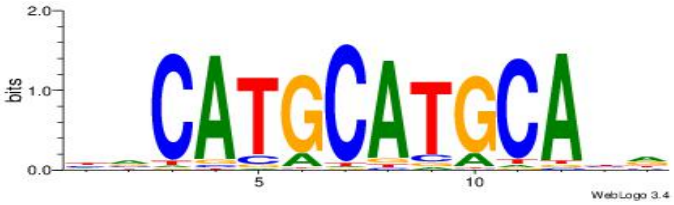
Dataset #:	4
Motif ID:	101

Motif name:	AAAAAAAAAAA
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:	0.043218

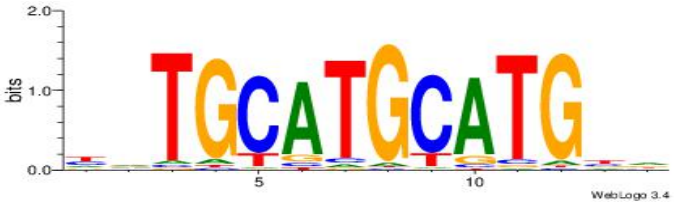
Alignment:

```
HVCATGCATGCABD
--CACGCM------
```

Original motif Consensus sequence: HVCATGCATGCABD



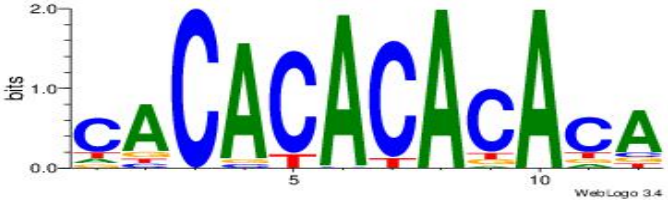
Reverse complement motif Consensus sequence: DVTGCATGCATGB



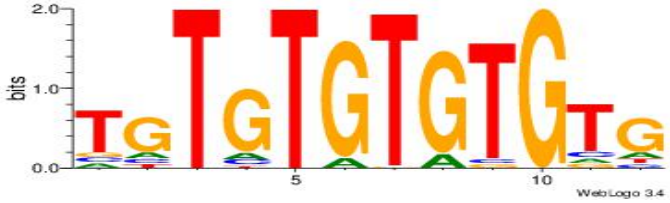
Dataset #:	4
Motif ID:	95
Motif name:	CACACACACACA
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	6
Similarity score:	0.0440329

Alignment:
TGTGTGTGTGTG
----YGCGTG--

Original motif Consensus sequence: CACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTG

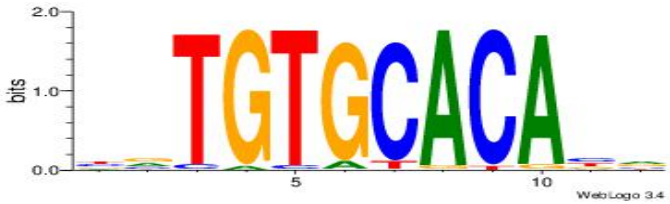


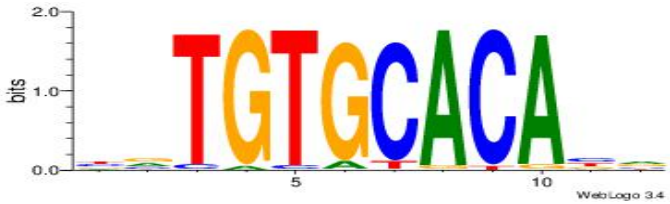
Dataset #:	4
Motif ID:	96
Motif name:	yrTGTGCACAyr
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	7
Number of overlap:	6
Similarity score:	0.0477579

Alignment:
BVTGTGCACABV
YGCGTG------

Original motif Consensus sequence: BVTGTGCACABV

Reverse complement motif Consensus sequence: BBTGTGCACAVV



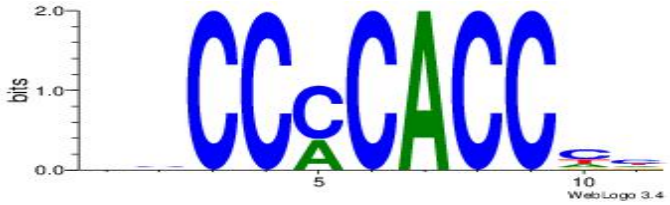


Dataset #:	4
Motif ID:	89
Motif name:	ccCCmCACCcc
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	6
Similarity score:	0.0479115

Alignment:

```
HBCCMCACCHH
-----CACGCM
```

Original motif Consensus sequence: HBCCMCACCHH



Reverse complement motif Consensus sequence: DDGGTGRGGBD

Dataset #:	4
Motif ID:	65

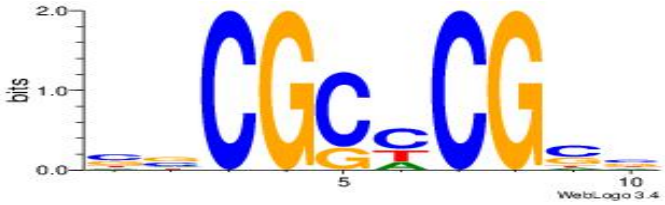
Motif name:	ssCGrGCGss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	6
Similarity score:	0.0487655

Alignment:

```
VBCGCMCGSV
----CACGCM
```

Original motif Consensus sequence: VSCGRGCGBV

Reverse complement motif Consensus sequence: VBCGCMCGSV



Dataset #:	1
Motif ID:	2
Motif name:	Motif 2
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	6
Similarity score:	0.0505006

Alignment:
CACACACA
CACGCM--

Original motif Consensus sequence: CACACACA

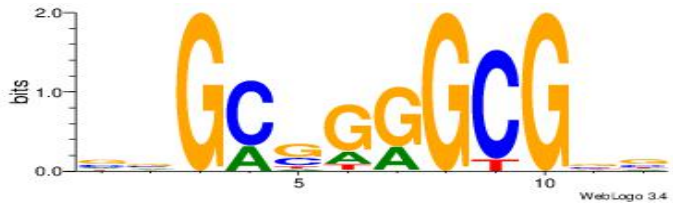
Reverse complement motif Consensus sequence: TGTGTGTG

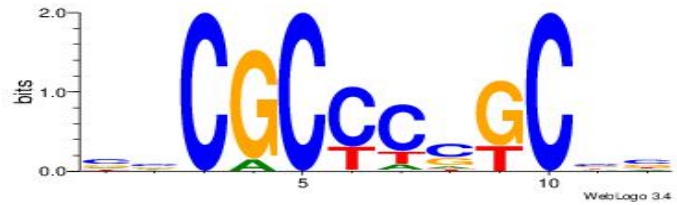
Dataset #:	4
Motif ID:	67
Motif name:	ssGMsGRGCGss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	6
Similarity score:	0.0538134

Alignment:
BBCGCCCSGCVV
CACGCM------

Original motif Consensus sequence: VVGCSGGGCGBB

Reverse complement motif Consensus sequence: BBCGCCCSGCVV





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

Original motif Consensus sequence: GAGRCAGR

Reverse complement motif Consensus sequence: MCTGKCTC

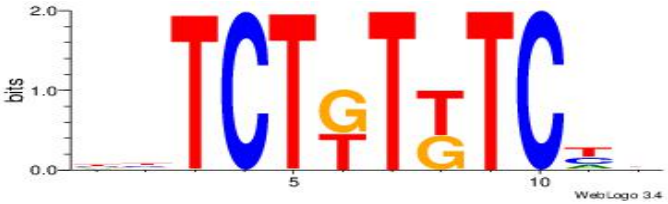
Best Matches for Top Significant Motif ID 13 (Highest to Lowest)

Dataset #:	4
Motif ID:	92
Motif name:	tyTCTkTkTCyy
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	8
Similarity score:	0.0131318

Alignment:

```
VHGARAYAGAVV
--GAGRCAGR--
```

Original motif Consensus sequence: BBTCTKTKTCHB



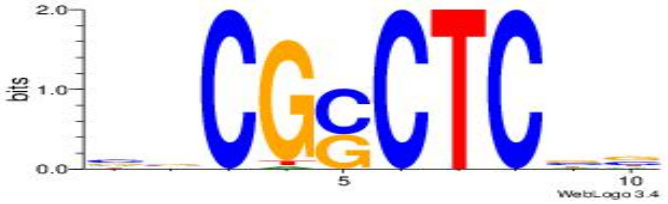
Reverse complement motif Consensus sequence: VHGARAYAGAVV

Dataset #:	4
Motif ID:	73
Motif name:	ssCGsCTCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	8
Similarity score:	0.0334555

Alignment:

```
BBGAGSCGVV
--GAGRCAGR
```

Original motif Consensus sequence: VVCGSCTCBB



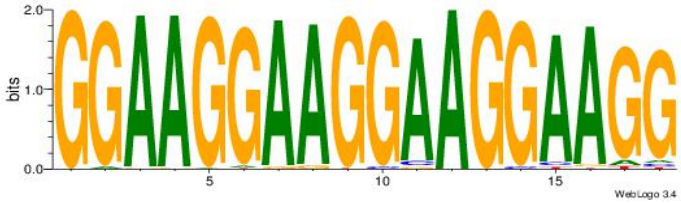
Reverse complement motif Consensus sequence: BBGAGSCGVV

Dataset #:	3
Motif ID:	48
Motif name:	EWSR1-FLI1
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:	0.0397014

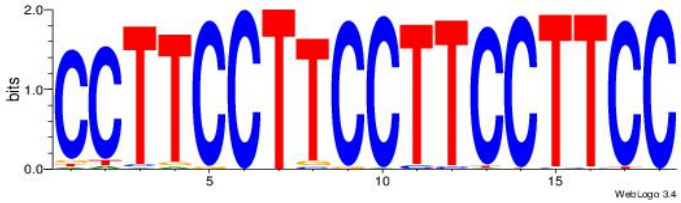
Alignment:

```
GGAAGGAAGGAAGGAAGG
------GAGRCAGR----
```

Original motif Consensus sequence: GGAAGGAAGGAAGGAAGG



Reverse complement motif Consensus sequence: CCTTCCTTCCTTCCTTCC



Dataset #:	4
Motif ID:	99
Motif name:	sgCTGGCCAGcs
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4

Number of overlap: 8
Similarity score: 0.0475948

Alignment:
VVCTGGCCAGBB
-MCTGKCTC---

Original motif Consensus sequence: BBCTGGCCAGVV

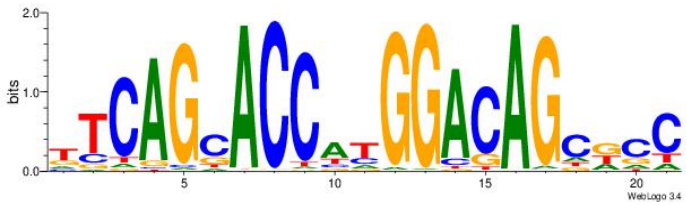
Reverse complement motif Consensus sequence: VVCTGGCCAGBB

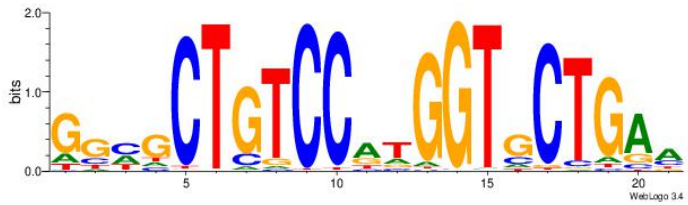
Dataset #: 3
Motif ID: 35
Motif name: REST
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 4
Number of overlap: 8
Similarity score: 0.049302

Alignment:
GGYGCTGTCCATGGTGCTGAA
---MCTGKCTC----------

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC

Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA





Dataset #:	2
Motif ID:	23
Motif name:	Motif 23
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	8
Similarity score:	0.0551203

Alignment:
GGGGMGGG
GAGRCAGR

Original motif Consensus sequence: CCCRCCCC

Reverse complement motif Consensus sequence: GGGGMGGG

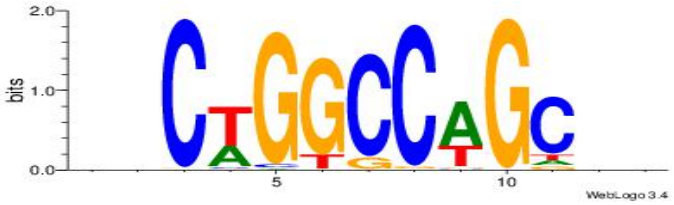
Dataset #:	4
Motif ID:	80

Motif name:	ssCwGGCCwGCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	8
Similarity score:	0.055328

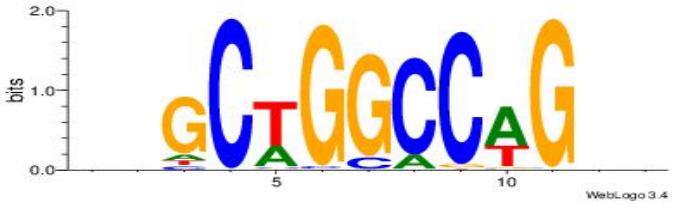
Alignment:

```
BBCWGGCCAGCBB
-MCTGKCTC----
```

Original motif Consensus sequence: BBCWGGCCAGCBB



Reverse complement motif Consensus sequence: BBGCTGGCCWGBI

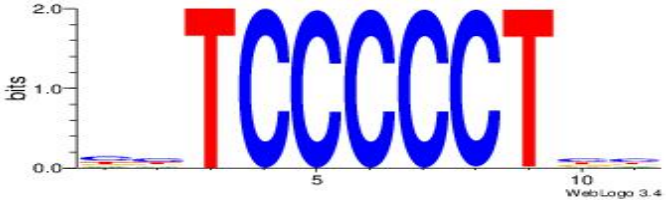


Dataset #:	4
Motif ID:	93
Motif name:	rrAGGGGGArr
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	8
Similarity score:	0.0555608

Alignment:
VVAGGGGGAVV
---GAGRCAGR

Original motif Consensus sequence: VVAGGGGGAVV

Reverse complement motif Consensus sequence: VVTCCCCCTVV

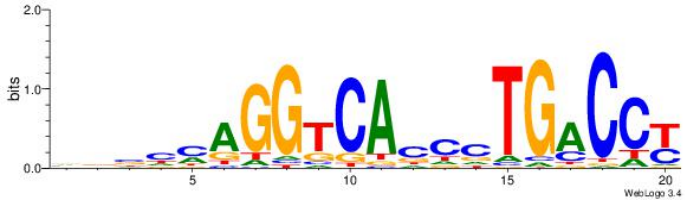


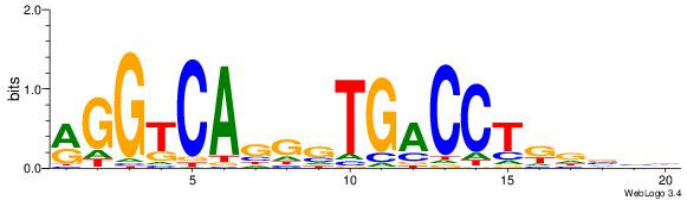
Dataset #:	3
Motif ID:	45
Motif name:	ESR1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	13
Number of overlap:	8
Similarity score:	0.055859

Alignment:
VDBHMAGGTCACCCTGACCY
----------MCTGKCTC

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY

Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV



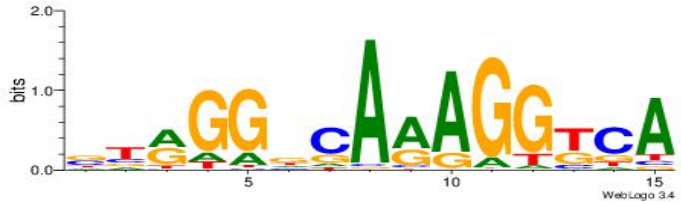


Dataset #:	3
Motif ID:	36
Motif name:	PPARGRXRA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	8
Similarity score:	0.0596402

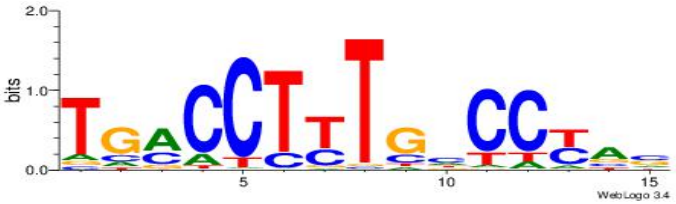
Alignment:

```
TGRCCTKTGHCCKAB
---MCTGKCTC----
```

Original motif Consensus sequence: BTRGGDCARAGGKCA



Reverse complement motif Consensus sequence: TGRCCTKTGHCCK



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

Original motif Consensus sequence: GCRCACRC

Reverse complement motif Consensus sequence: GKGTGKGC

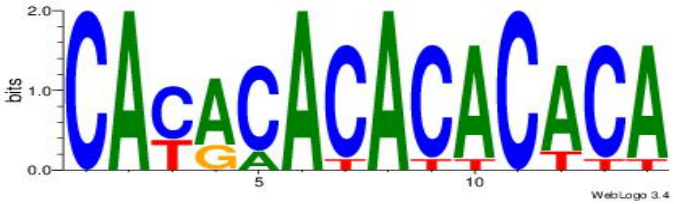
Best Matches for Top Significant Motif ID 14 (Highest to Lowest)

Dataset #:	2
Motif ID:	27
Motif name:	Motif 27
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0.0307099

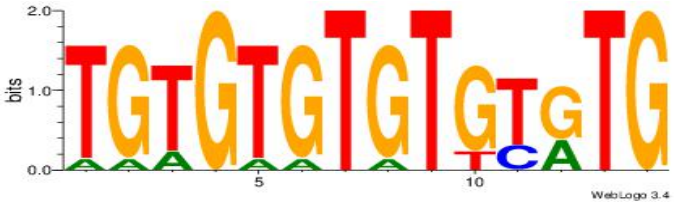
Alignment:

```
CAYACACACACACA
---GCRCACRC---
```

Original motif Consensus sequence: CAYACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTKT

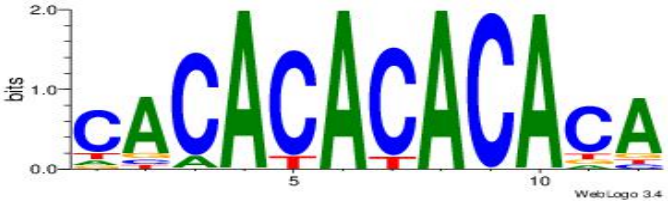


Dataset #:	4
Motif ID:	79
Motif name:	CACACACACACA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.0357914

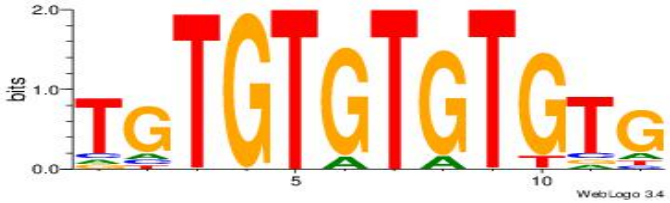
Alignment:

```
CACACACACACA
-GCRCACRC---
```

Original motif Consensus sequence: CACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTG

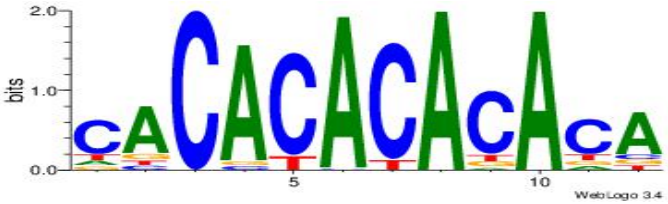


Dataset #:	4
Motif ID:	95
Motif name:	CACACACACACA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	8

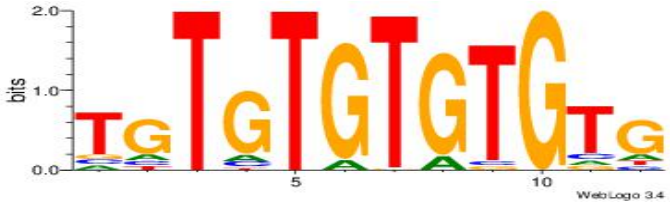
Similarity score: 0.0366948

Alignment:
CACACACACACA
-GCRCACRC---

Original motif Consensus sequence: CACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTG

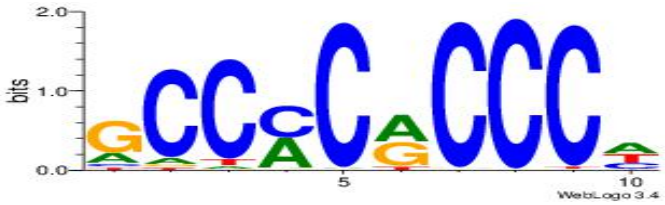


Dataset #: 3
Motif ID: 52
Motif name: Klf4
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 2
Number of overlap: 8
Similarity score: 0.03983

Alignment:
DGGGYGKGGC
-GKGTGKGC-

Original motif Consensus sequence: DGGGYGKGGC

Reverse complement motif Consensus sequence: GCCYCMCCCD



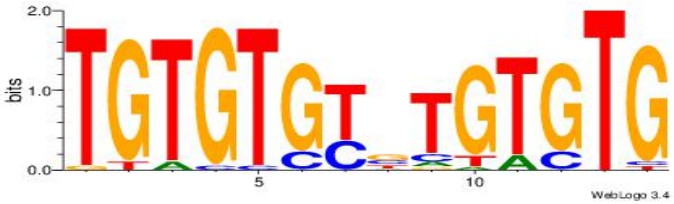
Dataset #:	2
Motif ID:	25
Motif name:	Motif 25
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	8
Similarity score:	0.0418776

Alignment:

```
CACACAVRCACACA
-----GCRCACRC-
```

Original motif Consensus sequence: CACACAVRCACACA

Reverse complement motif Consensus sequence: TGTGTGKVTGTGT



Dataset #:	3
Motif ID:	44

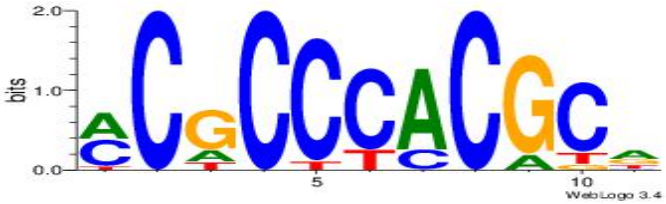
Motif name:	Egr1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	8
Similarity score:	0.0429433

Alignment:

```
HGCGTGGGCGK
-GKGTGKGC--
```

Original motif Consensus sequence: HGCGTGGGCGK

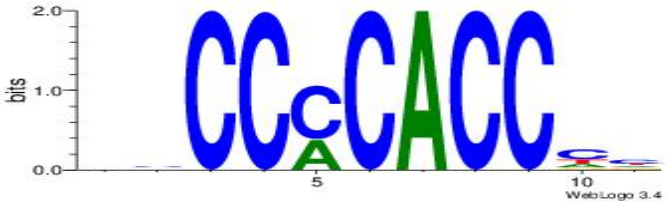
Reverse complement motif Consensus sequence: YCGCCCACGCH



Dataset #:	4
Motif ID:	89
Motif name:	ccCCmCACCcc
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	8
Similarity score:	0.0505252

Alignment:
DDGGTGRGGBD
-GKGTGKGC--

Original motif Consensus sequence: HBCCMCACCHH



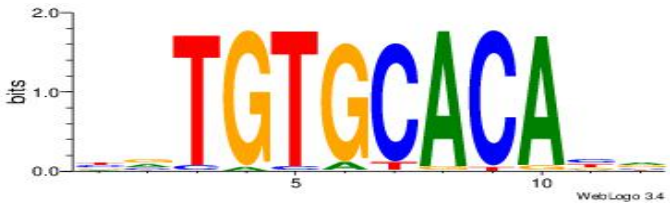
Reverse complement motif Consensus sequence: DDGGTGRGGBD

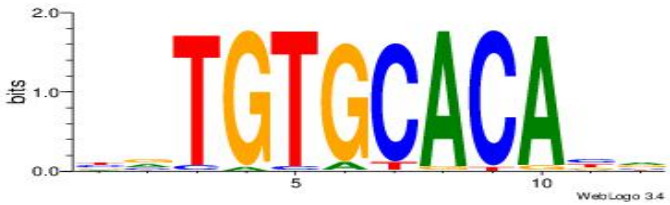
Dataset #:	4
Motif ID:	96
Motif name:	yrTGTGCACAyr
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0.0537384

Alignment:
BVTGTGCACABV
---GCRCACRC-

Original motif Consensus sequence: BVTGTGCACABV

Reverse complement motif Consensus sequence: BBTGTGCACAVV





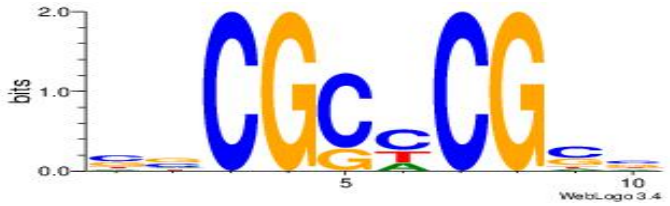
Dataset #:	4
Motif ID:	65
Motif name:	ssCGrGCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	8
Similarity score:	0.067702

Alignment:

```
VBCGCMCGSV
-GCRCACRC-
```

Original motif Consensus sequence: VSCGRGCGBV

Reverse complement motif Consensus sequence: VBCGCMCGSV



Dataset #:	4
Motif ID:	91

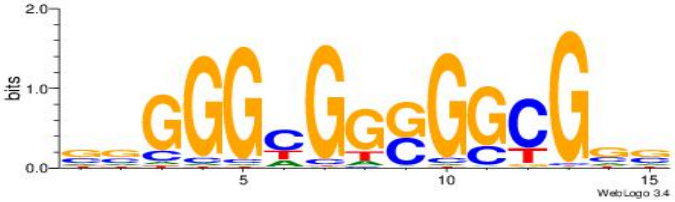
Motif name:	ssCGCCsCCrCCCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0.0685867

Alignment:

```
SSCGCCSCCGCCCSS
---GCRCACRC----
```

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS



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

Dataset #: 3 Motif ID: 30 Motif name: ZEB1

Original motif Consensus sequence: CACCTD

Reverse complement motif Consensus sequence: HAGGTG

Best Matches for Significant Motif ID 30 (Highest to Lowest)

Dataset #:	3
Motif ID:	62
Motif name:	RORA_1
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	6
Similarity score:	0.0141289

Alignment:

```
TGACCTDVWT
-CACCTD---
```

Original motif Consensus sequence: AWVDAGGTCA

Reverse complement motif Consensus sequence: TGACCTDVWT

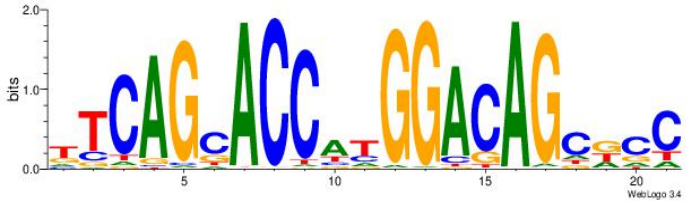
Dataset #: 3

Motif ID:	35
Motif name:	REST
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	6
Similarity score:	0.0143133

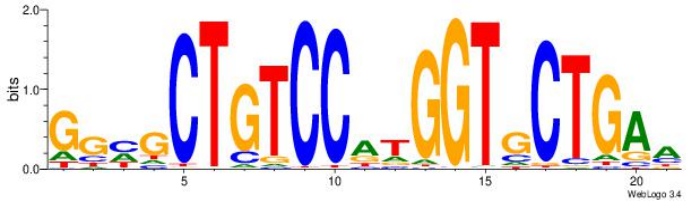
Alignment:

```
GGYGCTGTCCATGGTGCTGAA
----------HAGGTG-----
```

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC



Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA

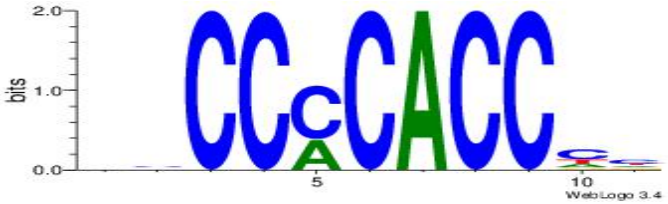


Dataset #:	4
Motif ID:	89
Motif name:	ccCCmCACCcc
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	6

Similarity score: 0.0148347

Alignment:
HBCCMCACCHH
-----CACCTD

Original motif Consensus sequence: HBCCMCACCHH



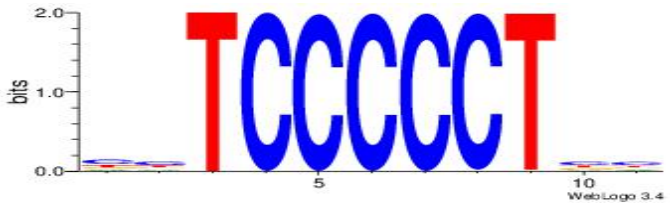
Reverse complement motif Consensus sequence: DDGGTGRGGBD

Dataset #: 4
Motif ID: 93
Motif name: rrAGGGGGArr
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 5
Number of overlap: 6
Similarity score: 0.0194512

Alignment:
VVAGGGGGAVV
-HAGGTG----

Original motif Consensus sequence: VVAGGGGGAVV

Reverse complement motif Consensus sequence: VVTCCCCCTVV



Dataset #:	3
Motif ID:	47
Motif name:	Esrrb
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	6
Similarity score:	0.0207244

Alignment:

```
CACGTG
HAGGTG
```

Original motif Consensus sequence: CACGTG

Reverse complement motif Consensus sequence: CACGTG

Dataset #:	3
Motif ID:	41

Motif name:	Arnt
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:	0.0207244

Alignment:

```
CACGTG
CACCTD
```

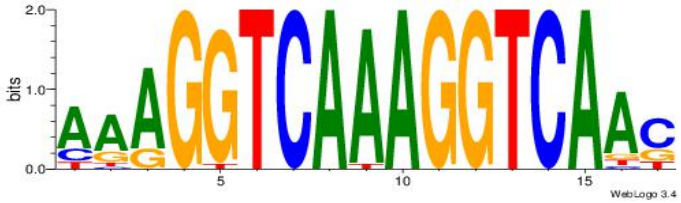
Original motif Consensus sequence: CACGTG

Reverse complement motif Consensus sequence: CACGTG

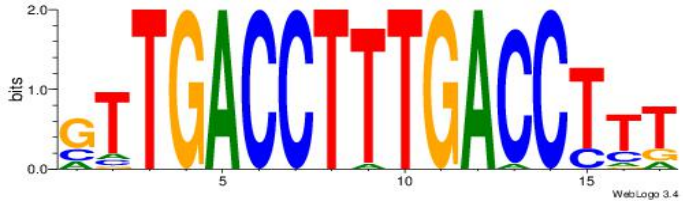
Dataset #:	3
Motif ID:	59
Motif name:	NR1H2RXRA
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	6
Similarity score:	0.0232753

Alignment:
GTTGACCTTTGACCTTT
----------CACCTD-

Original motif Consensus sequence: AAAGGTCAAAGGTCAAC



Reverse complement motif Consensus sequence: GTTGACCTTTGACCTTT



Dataset #:	3
Motif ID:	49
Motif name:	HIF1AARNT
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	6
Similarity score:	0.0237889

Alignment:
VBACGTGV
-HAGGTG-

Original motif Consensus sequence: VBACGTGV

Reverse complement motif Consensus sequence: VCACGTBV

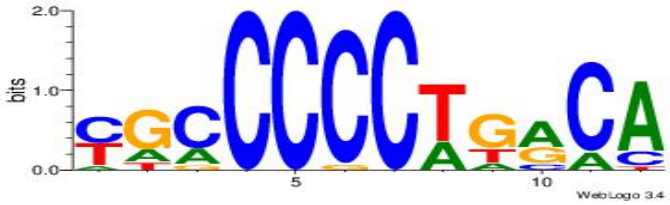
Dataset #:	3
Motif ID:	51
Motif name:	INSM1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	6
Similarity score:	0.0262123

Alignment:

```
TGYCAGGGGGCR
---HAGGTG---
```

Original motif Consensus sequence: TGYCAGGGGGCR

Reverse complement motif Consensus sequence: MGCCCCCTGMCA



Dataset #:	3
Motif ID:	36

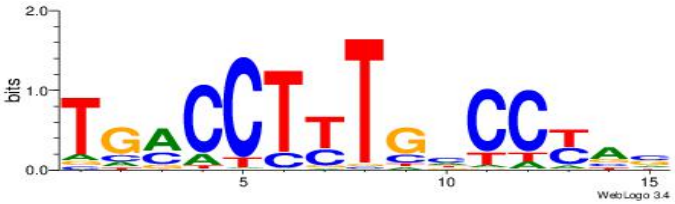
Motif name:	PPARGRXRA
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	9
Number of overlap:	6
Similarity score:	0.0264837

Alignment:

```
TGRCCTKTGHCCKAB
-CACCTD--------
```

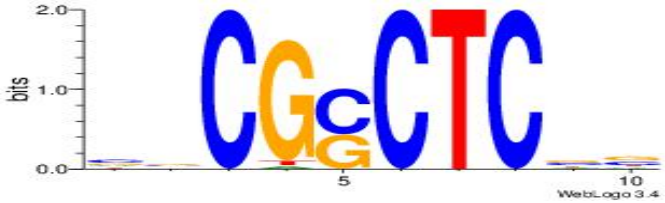
Original motif Consensus sequence: BTRGGDCARAGGKCA

Reverse complement motif Consensus sequence: TGRCCTKTGHCCK



Dataset #: 4 Motif ID: 73 Motif name: ssCGsCTCss

Original motif Consensus sequence: VVCGSCTCBB



Reverse complement motif Consensus sequence: BBGAGSCGVV

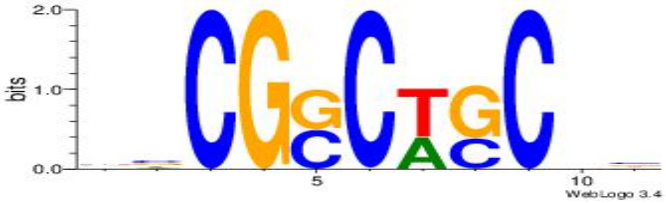
Best Matches for Significant Motif ID 73 (Highest to Lowest)

Dataset #:	4
Motif ID:	90
Motif name:	ssCGsCwsCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	10
Similarity score:	0

Alignment:

```
BBGSWGSCGBB
-BBGAGSCGVV
```

Original motif Consensus sequence: BBCGSCWSCBB



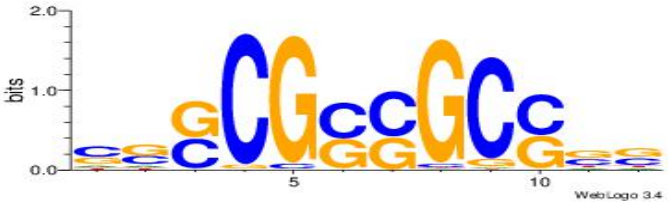
Reverse complement motif Consensus sequence: BBGSWGSCGBB

Dataset #:	4
Motif ID:	78
Motif name:	sssCGssGCsss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	10

Similarity score: 0.0108856

Alignment:
SSSCGSSGCSSS
-VVCGSCTCBB-

Original motif Consensus sequence: SSSCGSSGCSSS



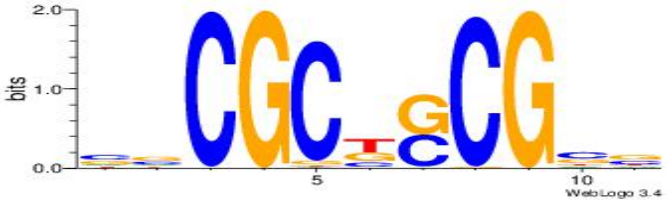
Reverse complement motif Consensus sequence: SSSGCSSCGSSS

Dataset #: 4
Motif ID: 94
Motif name: ssCGCksCGss
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 2
Number of overlap: 10
Similarity score: 0.0139257

Alignment:
VVCGCKSCGBB
-BBGAGSCGVV

Original motif Consensus sequence: VVCGCKSCGBB

Reverse complement motif Consensus sequence: BBCGSRGCGVV



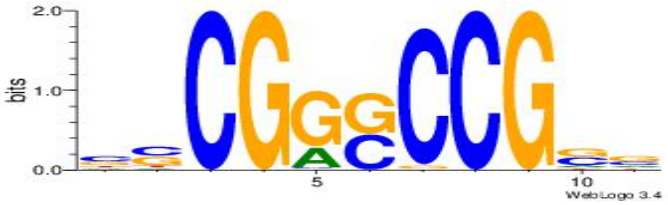
Dataset #:	4
Motif ID:	87
Motif name:	ssCGGsYCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0162661

Alignment:

```
BSCGGSCCGSV
VVCGSCTCBB-
```

Original motif Consensus sequence: BSCGGSCCGSV

Reverse complement motif Consensus sequence: VSCGGSCCGSB



Dataset #:	4
Motif ID:	91

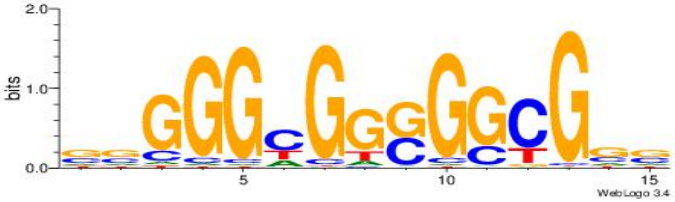
Motif name:	ssCGCCsCCrCCCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	10
Similarity score:	0.0236639

Alignment:

```
SSCGCCSCCGCCCSS
VVCGSCTCBB-----
```

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS



Dataset #:	4
Motif ID:	66
Motif name:	ssCGssCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0241432

Alignment:
BSCGSSCGSV
VVCGSCTCBB

Original motif Consensus sequence: BSCGSSCGSV

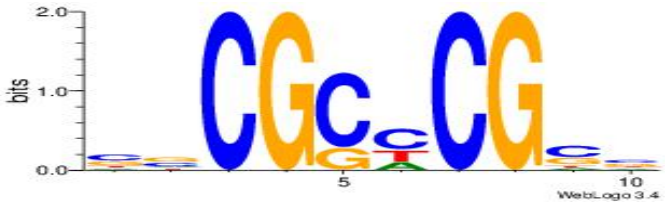
Reverse complement motif Consensus sequence: VSCGSSCGSB

Dataset #:	4
Motif ID:	65
Motif name:	ssCGrGCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0252915

Alignment:
VBCGCMCGSV
VVCGSCTCBB

Original motif Consensus sequence: VSCGRGCGBV

Reverse complement motif Consensus sequence: VBCGCMCGSV

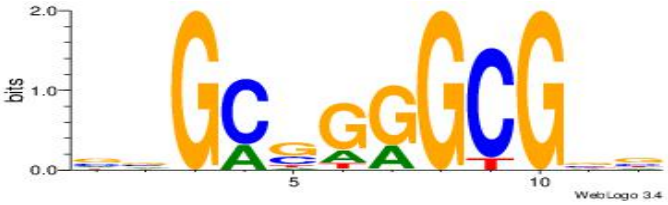


Dataset #:	4
Motif ID:	67
Motif name:	ssGMsGRGCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	10
Similarity score:	0.0315402

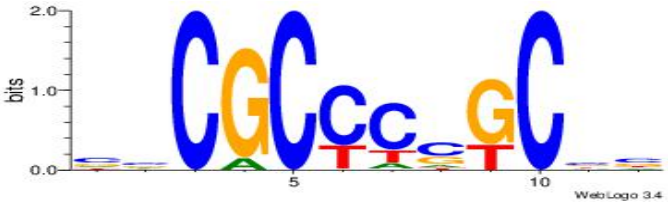
Alignment:

```
BBCGCCCSGCVV
--VVCGSCTCBB
```

Original motif Consensus sequence: VVGCSGGGCGBB



Reverse complement motif Consensus sequence: BBCGCCCSGCVV



Dataset #:	4
Motif ID:	72

Motif name:	ssCKCwsCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	10
Similarity score:	0.0340702

Alignment:

```
VBCGSWGCGVB
-VVCGSCTCBB
```

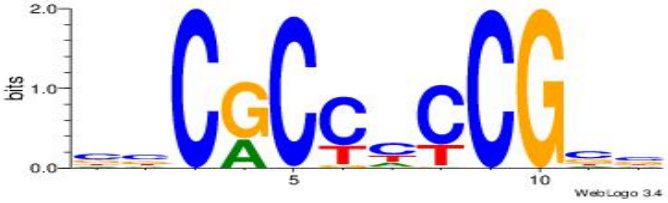
Original motif Consensus sequence: BVCGCWSCGBV

Reverse complement motif Consensus sequence: VBCGSWGCGVB

Dataset #:	4
Motif ID:	88
Motif name:	ssCrCYyYCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0353522

Alignment:
BBCRCCYCCGBB
VVCGSCTCBB--

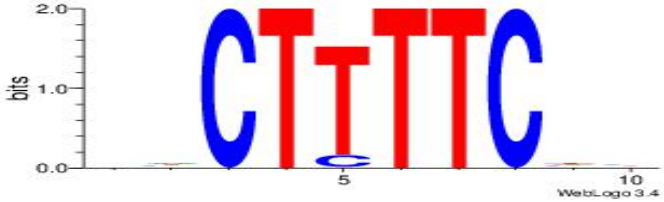
Original motif Consensus sequence: BBCRCCYCCGBB



Reverse complement motif Consensus sequence: BBCGGKGGMGBB

Dataset #: 4 Motif ID: 68 Motif name: dwCTTTTCwy

Original motif Consensus sequence: DHCTTTTCHH



Reverse complement motif Consensus sequence: DHGAAAAGHD

Best Matches for Significant Motif ID 68 (Highest to Lowest)

Dataset #:	4
Motif ID:	71
Motif name:	wyATTTTAww
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1

Number of overlap: 10
Similarity score: 0.00508721

Alignment:
DDTAAAATHD
DHGAAAAGHD

Original motif Consensus sequence: DHATTTTADD

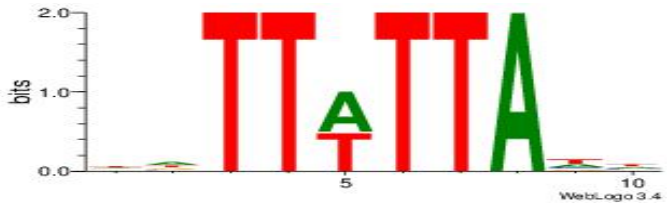
Reverse complement motif Consensus sequence: DDTAAAATHD

Dataset #: 4
Motif ID: 81
Motif name: wwTAAwAAww
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 1
Number of overlap: 10
Similarity score: 0.0148156

Alignment:
DDTAAWAAHH
DHGAAAAGHD

Original motif Consensus sequence: DDTAAWAAHH

Reverse complement motif Consensus sequence: HHTTWTTADD



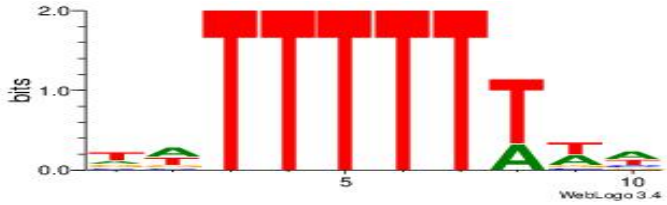
Dataset #:	4
Motif ID:	76
Motif name:	wwWAAAAAwa
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0152278

Alignment:

```
WWAAAAAAWH
DHGAAAAGHD
```

Original motif Consensus sequence: WWAAAAAAWH

Reverse complement motif Consensus sequence: HWTTTTTTWW



Dataset #:	4
Motif ID:	83

Motif name:	wwTAAAwAww
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0196583

Alignment:

```
DDTAAAWAHH
DHGAAAAGHD
```

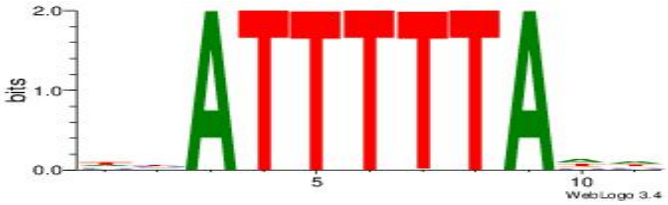
Original motif Consensus sequence: DDTAAAWAHH

Reverse complement motif Consensus sequence: HHTWTTTADD

Dataset #:	4
Motif ID:	85
Motif name:	wtATTTTTAww
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0226988

Alignment:
DDTAAAAATHD
DHGAAAAGHD-

Original motif Consensus sequence: DHATTTTTADD



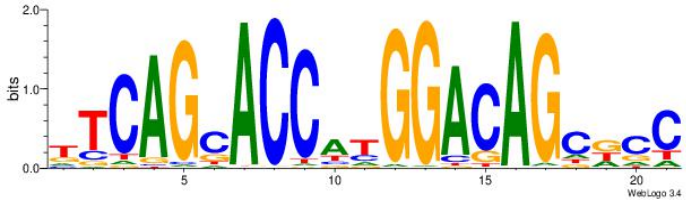
Reverse complement motif Consensus sequence: DDTAAAAATHD

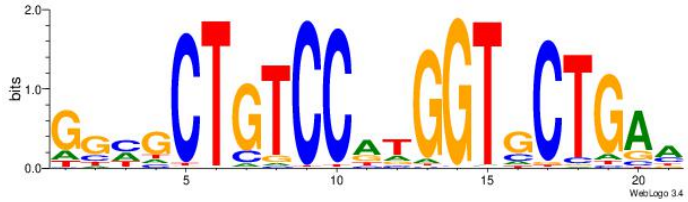
Dataset #:	3
Motif ID:	35
Motif name:	REST
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	10
Number of overlap:	10
Similarity score:	0.0242678

Alignment:
GGYGCTGTCCATGGTGCTGAA
---------DHCTTTTCHH--

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC

Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA



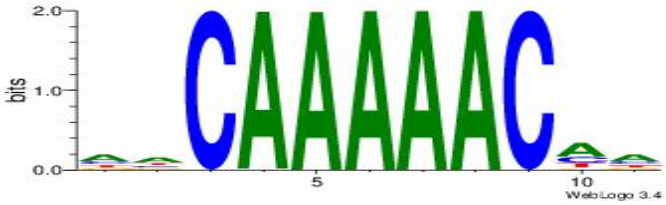


Dataset #:	4
Motif ID:	86
Motif name:	aaCAAAAACaa
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	10
Similarity score:	0.0309896

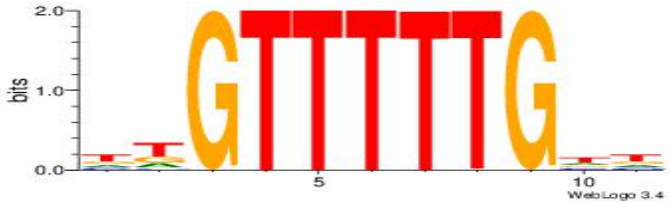
Alignment:

```
HTGTTTTTGHH
-DHCTTTTCHH
```

Original motif Consensus sequence: HHCAAAAACAH



Reverse complement motif Consensus sequence: HTGTTTTTGHH



Dataset #:	4
Motif ID:	69

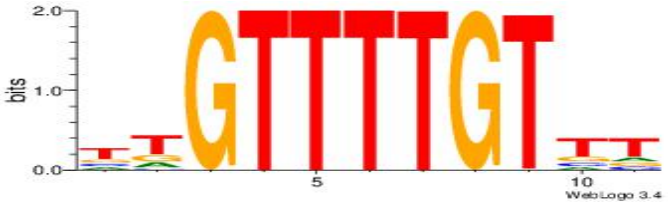
Motif name:	aaACAAAACaa
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0311578

Alignment:

```
TTGTTTTGTTT
DHCTTTTCHH-
```

Original motif Consensus sequence: AAACAAAACAA

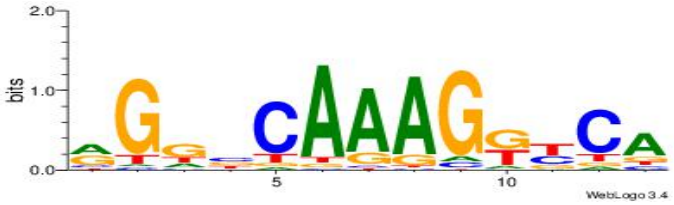
Reverse complement motif Consensus sequence: TTGTTTTGTTT



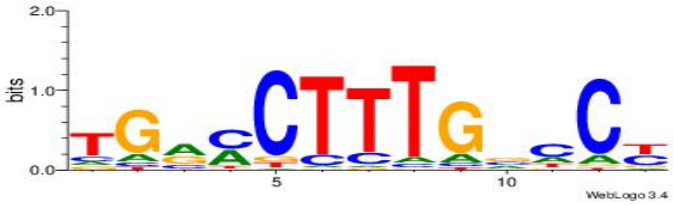
Dataset #:	3
Motif ID:	50
Motif name:	HNF4A
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.03324

Alignment:
RGGBCAAAGKYCA
--DHGAAAAGHD-

Original motif Consensus sequence: RGGBCAAAGKYCA



Reverse complement motif Consensus sequence: TGMYCTTTGBCCK

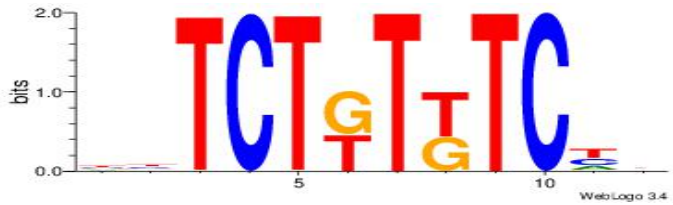


Dataset #:	4
Motif ID:	92
Motif name:	tyTCTkTkTCyy
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0365489

Alignment:
BBTCTKTKTCHB
-DHCTTTTCHH-

Original motif Consensus sequence: BBTCTKTKTCHB

Reverse complement motif Consensus sequence: VHGARAYAGAVV



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

Original motif Consensus sequence: AMACA

Reverse complement motif Consensus sequence: TGTRT

Best Matches for Significant Motif ID 18 (Highest to Lowest)

Dataset #:	1
Motif ID:	2
Motif name:	Motif 2
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	5
Similarity score:	0

Alignment:

```
CACACACA
---AMACA
```

Original motif Consensus sequence: CACACACA

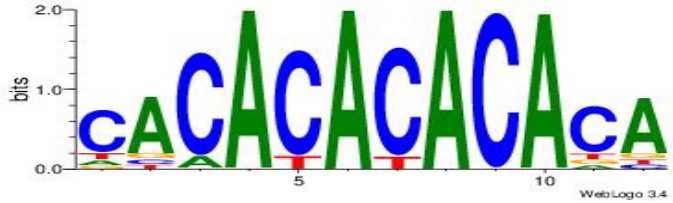
Reverse complement motif Consensus sequence: TGTGTGTG

Dataset #:	4
Motif ID:	79
Motif name:	CACACACACACA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	5
Similarity score:	0.0148279

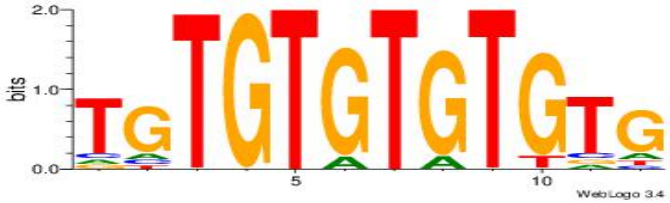
Alignment:

```
TGTGTGTGTGTG
--TGTRT-----
```

Original motif Consensus sequence: CACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTG

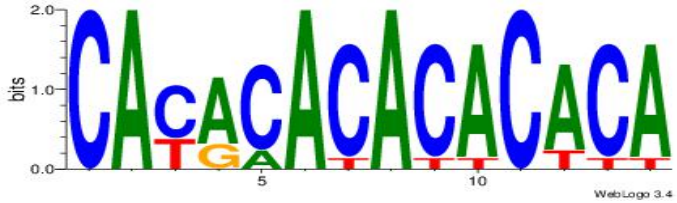


Dataset #:	2
Motif ID:	27
Motif name:	Motif 27
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	5
Similarity score:	0.0192752

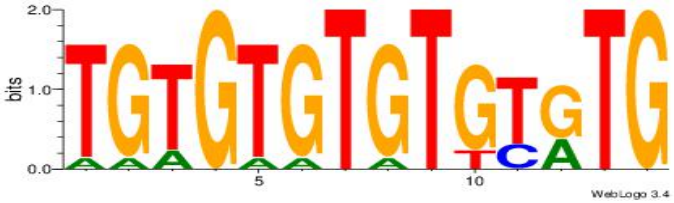
Alignment:

```
CAYACACACACACA
-----AMACA----
```

Original motif Consensus sequence: CAYACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTKT

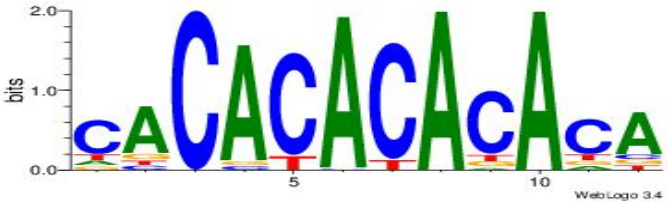


Dataset #:	4
Motif ID:	95
Motif name:	CACACACACACA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	5

Similarity score: 0.0228414

Alignment:
CACACACACACA
---AMACA----

Original motif Consensus sequence: CACACACACACA



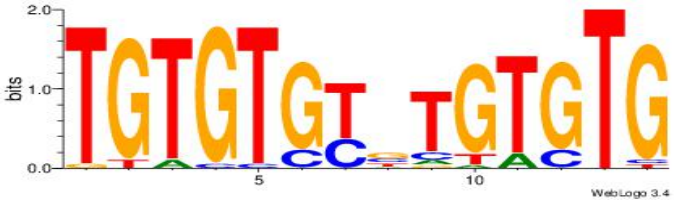
Reverse complement motif Consensus sequence: TGTGTGTGTGTG

Dataset #: 2
Motif ID: 25
Motif name: Motif 25
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 10
Number of overlap: 5
Similarity score: 0.0233505

Alignment:
CACACAVRCACACA
---------AMACA

Original motif Consensus sequence: CACACAVRCACACA

Reverse complement motif Consensus sequence: TGTGTGKVTGTGT



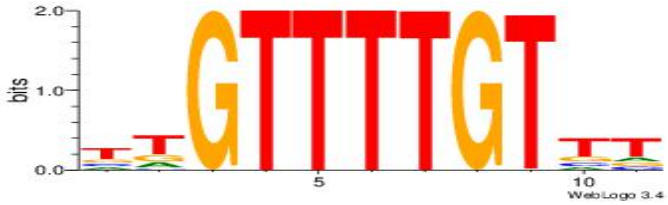
Dataset #:	4
Motif ID:	69
Motif name:	aaACAAAACaa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	5
Similarity score:	0.0274014

Alignment:

```
AAACAAAACAA
-----AMACA-
```

Original motif Consensus sequence: AAACAAAACAA

Reverse complement motif Consensus sequence: TTGTTTTGTTT



Dataset #:	4
Motif ID:	86

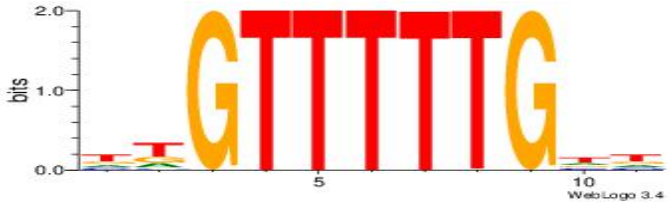
Motif name:	aaCAAAAACaa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	5
Similarity score:	0.0291354

Alignment:

```
HHCAAAAACAH
-----AMACA-
```

Original motif Consensus sequence: HHCAAAAACAH

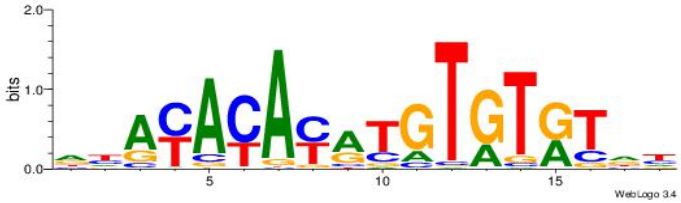
Reverse complement motif Consensus sequence: HTGTTTTTGHH



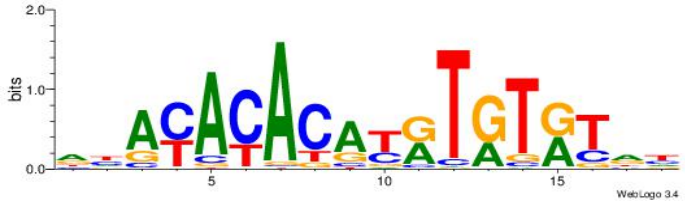
Dataset #:	4
Motif ID:	97
Motif name:	ryayAyAyrtGTRTrTry
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	10
Number of overlap:	5
Similarity score:	0.0293401

Alignment:
HDAMACACAKKTKTKTHD
----AMACA---------

Original motif Consensus sequence: DHAYAYAYRTGTGTRTDH



Reverse complement motif Consensus sequence: HDAMACACAKKTKTKTHD



Dataset #:	4
Motif ID:	100
Motif name:	wrTGTATACAyw
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	5
Similarity score:	0.0302831

Alignment:
HDTGTATACAHD
--TGTRT-----

Original motif Consensus sequence: HDTGTATACAHD

Reverse complement motif Consensus sequence: DHTGTATACADH

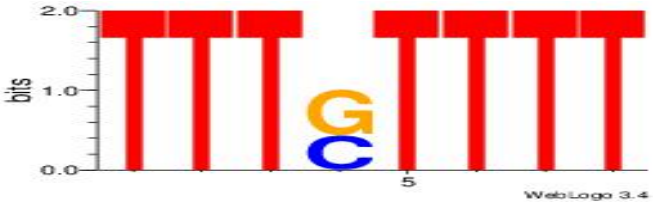
Dataset #:	1
Motif ID:	5
Motif name:	Motif 5
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	5
Similarity score:	0.0378142

Alignment:

```
AAAASAAA
-AMACA--
```

Original motif Consensus sequence: AAAASAAA

Reverse complement motif Consensus sequence: TTTSTTTT



Dataset #: 4 Motif ID: 71 Motif name: wyATTTTAww

Original motif Consensus sequence: DHATTTTADD

Reverse complement motif Consensus sequence: DDTAAAATHD

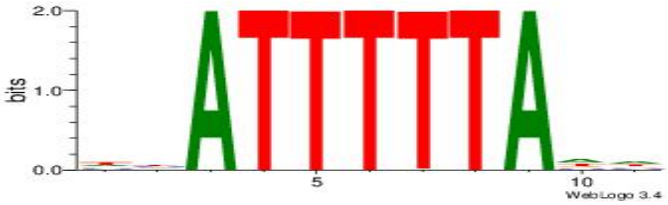
Best Matches for Significant Motif ID 71 (Highest to Lowest)

Dataset #:	4
Motif ID:	85
Motif name:	wtATTTTTAww
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0

Alignment:

```
DHATTTTTADD
DHATTTTADD-
```

Original motif Consensus sequence: DHATTTTTADD



Reverse complement motif Consensus sequence: DDTAAAAATHD

Dataset #:	4
Motif ID:	81
Motif name:	wwTAAwAAww
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:	0.00285443

Alignment:

```
DDTAAWAAHH
DDTAAAATHD
```

Original motif Consensus sequence: DDTAAWAAHH

Reverse complement motif Consensus sequence: HHTTWTTADD

Dataset #:	4
Motif ID:	83
Motif name:	wwTAAAwAww
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: 0.00437246

Alignment:
DDTAAAWAHH
DDTAAAATHD

Original motif Consensus sequence: DDTAAAWAHH

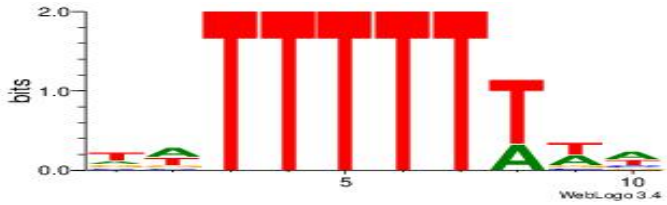
Reverse complement motif Consensus sequence: HHTWTTTADD

Dataset #: 4
Motif ID: 76
Motif name: wwWAAAAAwa
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: 0.0153432

Alignment:
WWAAAAAAWH
DDTAAAATHD

Original motif Consensus sequence: WWAAAAAAWH

Reverse complement motif Consensus sequence: HWTTTTTTWW

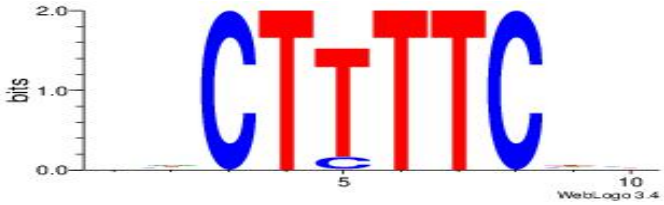


Dataset #:	4
Motif ID:	68
Motif name:	dwCTTTTCwy
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0177129

Alignment:

```
DHGAAAAGHD
DDTAAAATHD
```

Original motif Consensus sequence: DHCTTTTCHH



Reverse complement motif Consensus sequence: DHGAAAAGHD

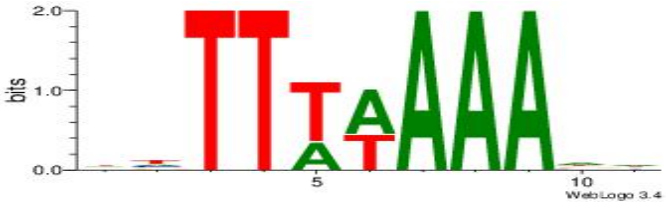
Dataset #:	4
Motif ID:	104

Motif name:	wtTTWwAAAaw
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0302024

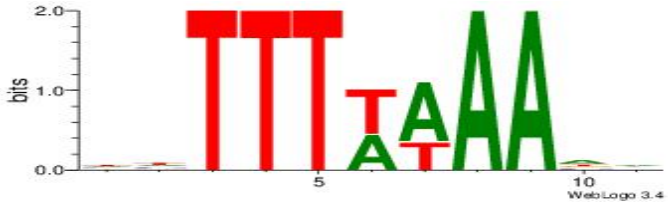
Alignment:

```
DDTTTWAAAHH
DHATTTTADD-
```

Original motif Consensus sequence: HHTTTWAAADD



Reverse complement motif Consensus sequence: DDTTTWAAAHH



Dataset #:	4
Motif ID:	74
Motif name:	twTACATAvw
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0367109

Alignment:
DBTATGTAHH
DHATTTTADD

Original motif Consensus sequence: HHTACATAVD

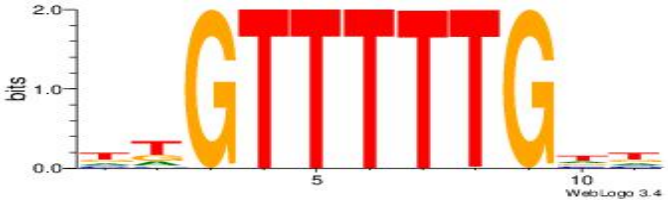
Reverse complement motif Consensus sequence: DBTATGTAHH

Dataset #:	4
Motif ID:	86
Motif name:	aaCAAAAACaa
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:	0.0372694

Alignment:
HHCAAAAACAH
DDTAAAATHD-

Original motif Consensus sequence: HHCAAAAACAH

Reverse complement motif Consensus sequence: HTGTTTTTGHH



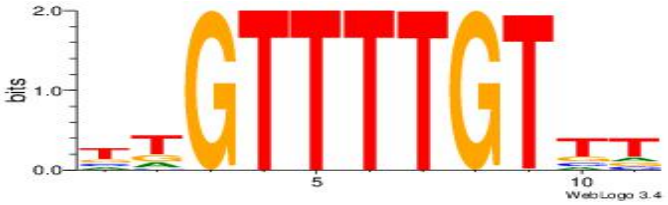
Dataset #:	4
Motif ID:	69
Motif name:	aaACAAAACaa
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0401253

Alignment:

```
AAACAAAACAA
DDTAAAATHD-
```

Original motif Consensus sequence: AAACAAAACAA

Reverse complement motif Consensus sequence: TTGTTTTGTTT



Dataset #:	4
Motif ID:	102

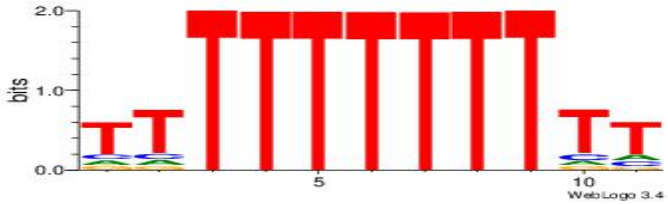
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0513368

Alignment:

```
AAAAAAAAAAA
DDTAAAATHD-
```

Original motif Consensus sequence: AAAAAAAAAAA

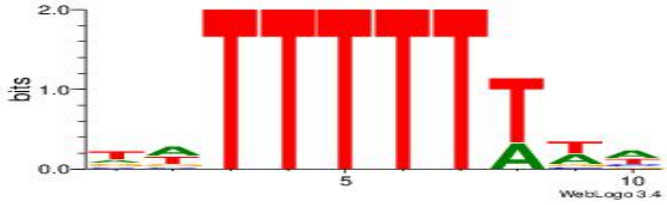
Reverse complement motif Consensus sequence: TTTTTTTTTTT



Dataset #: 4 Motif ID: 76 Motif name: wwWAAAAAwa

Original motif Consensus sequence: WWAAAAAAWH

Reverse complement motif Consensus sequence: HWTTTTTTWW



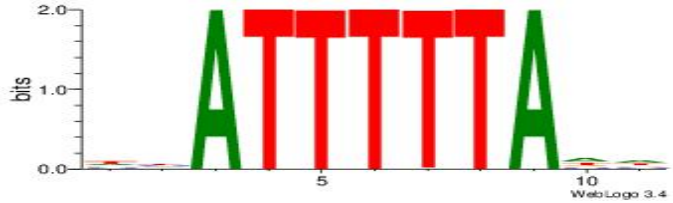
Best Matches for Significant Motif ID 76 (Highest to Lowest)

Dataset #:	4
Motif ID:	85
Motif name:	wtATTTTTAww
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.00795084

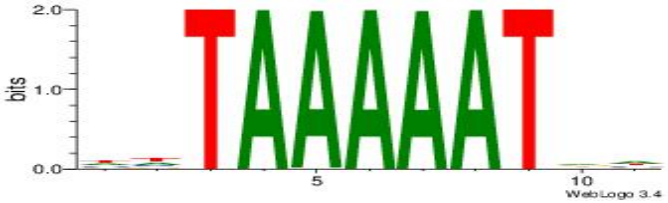
Alignment:

```
DHATTTTTADD
-HWTTTTTTWW
```

Original motif Consensus sequence: DHATTTTTADD



Reverse complement motif Consensus sequence: DDTAAAAATHD



Dataset #:	4
Motif ID:	81
Motif name:	wwTAAwAAww
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10

Similarity score: 0.0105869

Alignment:
DDTAAWAAHH
WWAAAAAAWH

Original motif Consensus sequence: DDTAAWAAHH

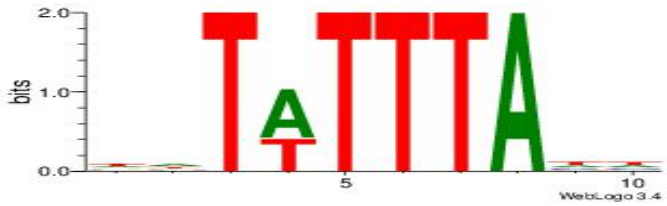
Reverse complement motif Consensus sequence: HHTTWTTADD

Dataset #: 4
Motif ID: 83
Motif name: wwTAAAwAww
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 1
Number of overlap: 10
Similarity score: 0.0135165

Alignment:
DDTAAAWAHH
WWAAAAAAWH

Original motif Consensus sequence: DDTAAAWAHH

Reverse complement motif Consensus sequence: HHTWTTTADD



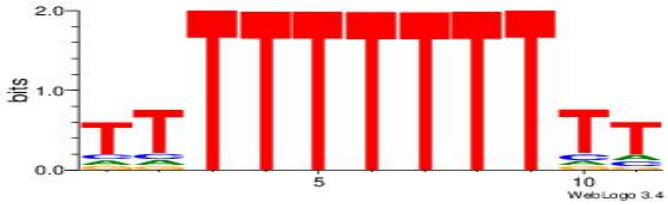
Dataset #:	4
Motif ID:	102
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0137579

Alignment:

```
TTTTTTTTTTT
HWTTTTTTWW-
```

Original motif Consensus sequence: AAAAAAAAAAA

Reverse complement motif Consensus sequence: TTTTTTTTTTT



Dataset #:	4
Motif ID:	86

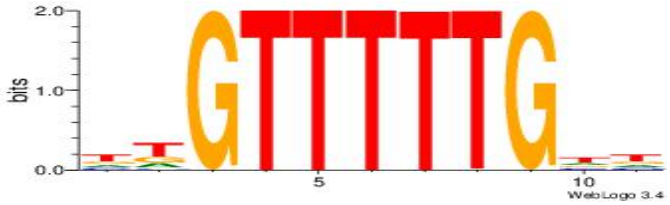
Motif name:	aaCAAAAACaa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0272712

Alignment:

```
HHCAAAAACAH
WWAAAAAAWH-
```

Original motif Consensus sequence: HHCAAAAACAH

Reverse complement motif Consensus sequence: HTGTTTTTGHH



Dataset #:	4
Motif ID:	71
Motif name:	wyATTTTAww
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0288034

Alignment:
DDTAAAATHD
WWAAAAAAWH

Original motif Consensus sequence: DHATTTTADD

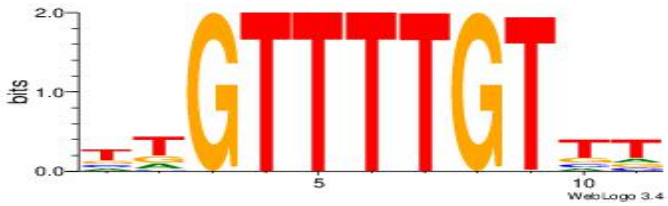
Reverse complement motif Consensus sequence: DDTAAAATHD

Dataset #:	4
Motif ID:	69
Motif name:	aaACAAAACaa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0387825

Alignment:
AAACAAAACAA
WWAAAAAAWH-

Original motif Consensus sequence: AAACAAAACAA

Reverse complement motif Consensus sequence: TTGTTTTGTTT

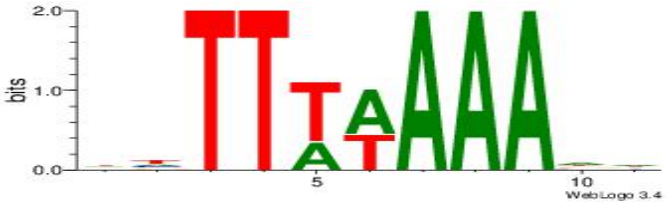


Dataset #:	4
Motif ID:	104
Motif name:	wtTTWwAAAaw
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0395975

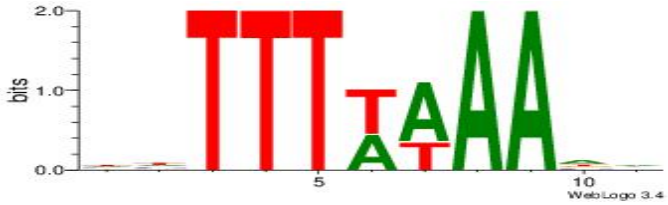
Alignment:

```
HHTTTWAAADD
-WWAAAAAAWH
```

Original motif Consensus sequence: HHTTTWAAADD



Reverse complement motif Consensus sequence: DDTTTWAAAHH



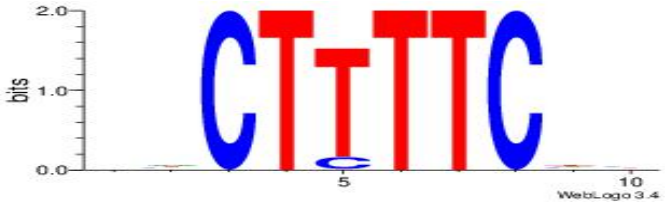
Dataset #:	4
Motif ID:	68

Motif name:	dwCTTTTCwy
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0413137

Alignment:

```
DHCTTTTCHH
HWTTTTTTWW
```

Original motif Consensus sequence: DHCTTTTCHH

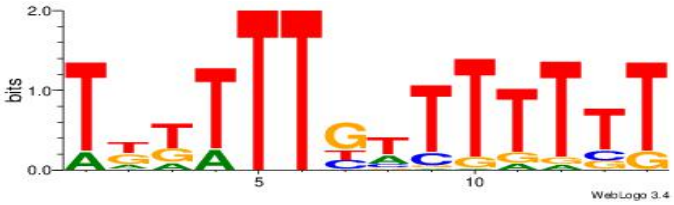


Reverse complement motif Consensus sequence: DHGAAAAGHD

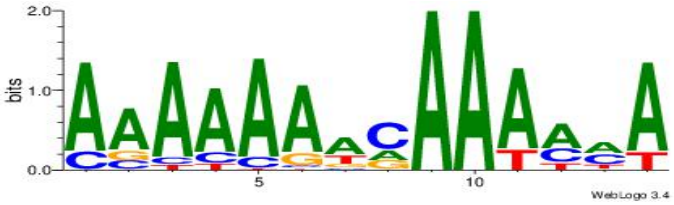
Dataset #:	2
Motif ID:	26
Motif name:	Motif 26
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0498611

Alignment:
AAAAAAACAAARRA
WWAAAAAAWH----

Original motif Consensus sequence: TKKTTTGTTTTTTT



Reverse complement motif Consensus sequence: AAAAAAACAAARR



Dataset #: 4 Motif ID: 83 Motif name: wwTAAAwAww

Original motif Consensus sequence: DDTAAAWAHH

Reverse complement motif Consensus sequence: HHTWTTTADD

Best Matches for Significant Motif ID 83 (Highest to Lowest)

Dataset #:	4
Motif ID:	81
Motif name:	wwTAAwAAww
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1

Number of overlap: 10
Similarity score: 0

Alignment:
DDTAAWAAHH
DDTAAAWAHH

Original motif Consensus sequence: DDTAAWAAHH

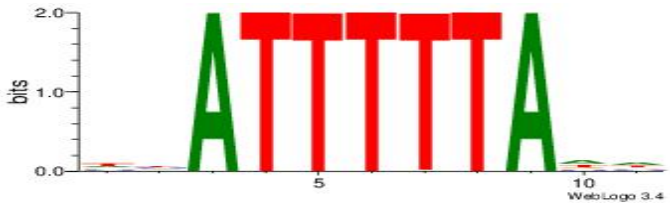
Reverse complement motif Consensus sequence: HHTTWTTADD

Dataset #: 4
Motif ID: 85
Motif name: wtATTTTTAww
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 1
Number of overlap: 10
Similarity score: 0.00769202

Alignment:
DHATTTTTADD
-HHTWTTTADD

Original motif Consensus sequence: DHATTTTTADD

Reverse complement motif Consensus sequence: DDTAAAAATHD



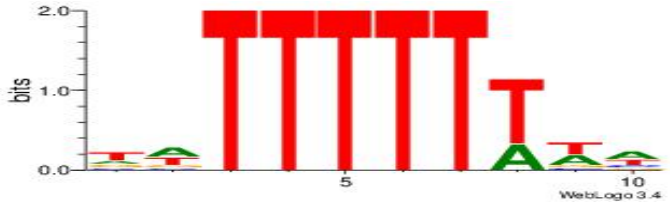
Dataset #:	4
Motif ID:	76
Motif name:	wwWAAAAAwa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0148593

Alignment:

```
WWAAAAAAWH
DDTAAAWAHH
```

Original motif Consensus sequence: WWAAAAAAWH

Reverse complement motif Consensus sequence: HWTTTTTTWW



Dataset #:	4
Motif ID:	74

Motif name:	twTACATAvw
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0155512

Alignment:

```
DBTATGTAHH
HHTWTTTADD
```

Original motif Consensus sequence: HHTACATAVD

Reverse complement motif Consensus sequence: DBTATGTAHH

Dataset #:	4
Motif ID:	71
Motif name:	wyATTTTAww
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:	0.0191754

Alignment:
DHATTTTADD
HHTWTTTADD

Original motif Consensus sequence: DHATTTTADD

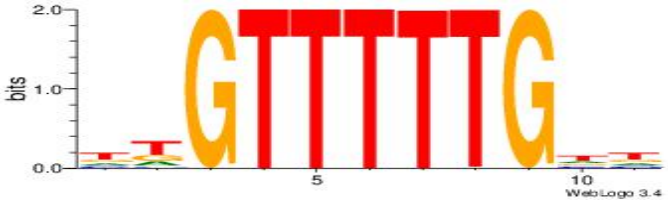
Reverse complement motif Consensus sequence: DDTAAAATHD

Dataset #:	4
Motif ID:	86
Motif name:	aaCAAAAACaa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0386588

Alignment:
HHCAAAAACAH
DDTAAAWAHH-

Original motif Consensus sequence: HHCAAAAACAH

Reverse complement motif Consensus sequence: HTGTTTTTGHH

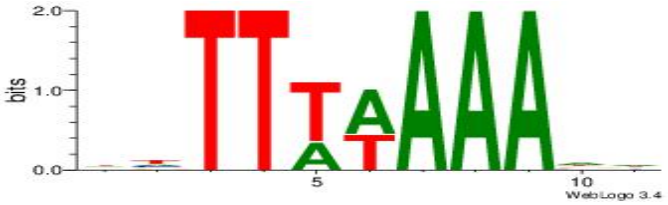


Dataset #:	4
Motif ID:	104
Motif name:	wtTTWwAAAaw
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	10
Similarity score:	0.0400542

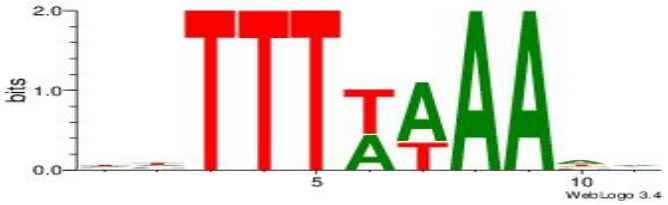
Alignment:

```
HHTTTWAAADD
-DDTAAAWAHH
```

Original motif Consensus sequence: HHTTTWAAADD



Reverse complement motif Consensus sequence: DDTTTWAAAHH



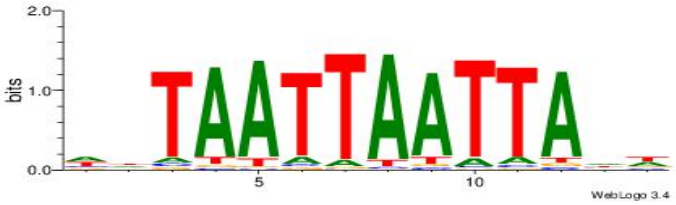
Dataset #:	4
Motif ID:	98

Motif name:	wwTAATTAATTAww
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	10
Similarity score:	0.0425216

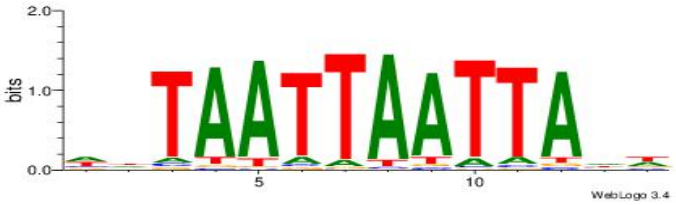
Alignment:

```
DHTAATTAATTADH
HHTWTTTADD----
```

Original motif Consensus sequence: HDTAATTAATTAHD



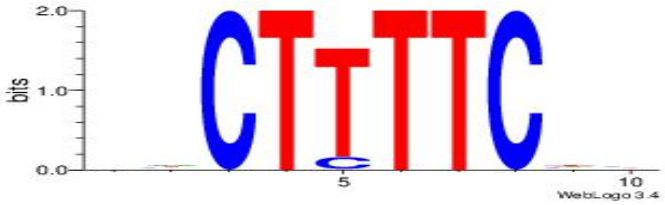
Reverse complement motif Consensus sequence: DHTAATTAATTADH



Dataset #:	4
Motif ID:	68
Motif name:	dwCTTTTCwy
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0470869

Alignment:
DHCTTTTCHH
HHTWTTTADD

Original motif Consensus sequence: DHCTTTTCHH



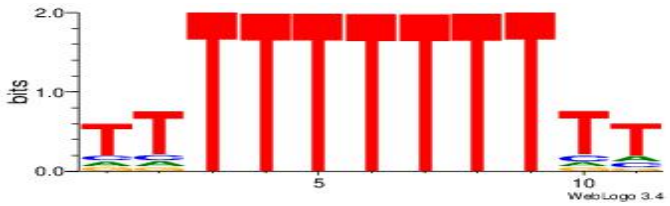
Reverse complement motif Consensus sequence: DHGAAAAGHD

Dataset #:	4
Motif ID:	102
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0497246

Alignment:
TTTTTTTTTTT
-HHTWTTTADD

Original motif Consensus sequence: AAAAAAAAAAA

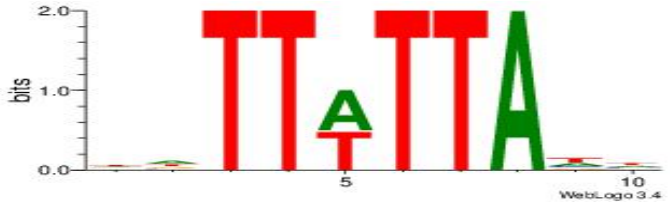
Reverse complement motif Consensus sequence: TTTTTTTTTT



Dataset #: 4 **Motif ID: 81** **Motif name: wwTAAwAAww**

Original motif Consensus sequence: DDTAAWAAHH

Reverse complement motif Consensus sequence: HHTTWTTADD



Best Matches for Significant Motif ID 81 (Highest to Lowest)

Dataset #:	4
Motif ID:	83
Motif name:	wwTAAAwAww
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0

Alignment:

```
DDTAAAWAHH
DDTAAWAAHH
```

Original motif Consensus sequence: DDTAAAWAHH

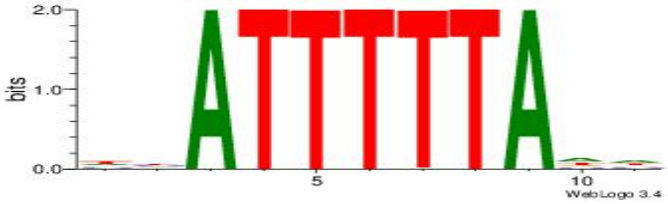
Reverse complement motif Consensus sequence: HHTWTTTADD

Dataset #:	4
Motif ID:	85
Motif name:	wtATTTTTAww
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.00383605

Alignment:

```
DHATTTTTADD
-HHTTWTTADD
```

Original motif Consensus sequence: DHATTTTTADD



Reverse complement motif Consensus sequence: DDTAAAAATHD

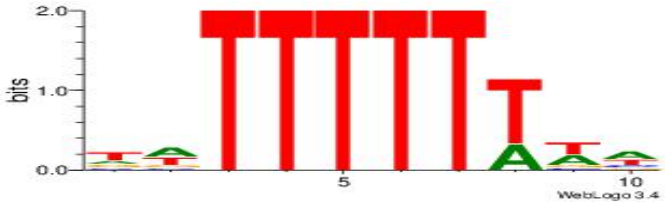
Dataset #:	4
Motif ID:	76
Motif name:	wwWAAAAAwa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0119297

Alignment:

```
WWAAAAAAWH
DDTAAWAAHH
```

Original motif Consensus sequence: WWAAAAAAWH

Reverse complement motif Consensus sequence: HWTTTTTTWW



Dataset #:	4
Motif ID:	71
Motif name:	wyATTTTAww
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: 0.0176574

Alignment:
DHATTTTADD
HHTTWTTADD

Original motif Consensus sequence: DHATTTTADD

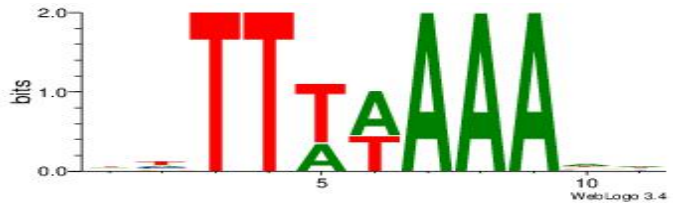
Reverse complement motif Consensus sequence: DDTAAAATHD

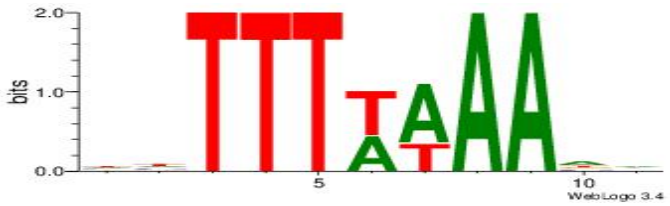
Dataset #: 4
Motif ID: 104
Motif name: wtTTWwAAAaw
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 1
Number of overlap: 10
Similarity score: 0.0376356

Alignment:
HHTTTWAAADD
-DDTAAWAAHH

Original motif Consensus sequence: HHTTTWAAADD

Reverse complement motif Consensus sequence: DDTTTWAAAHH



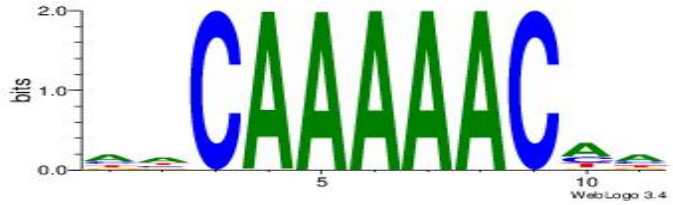


Dataset #:	4
Motif ID:	86
Motif name:	aaCAAAAACaa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0380114

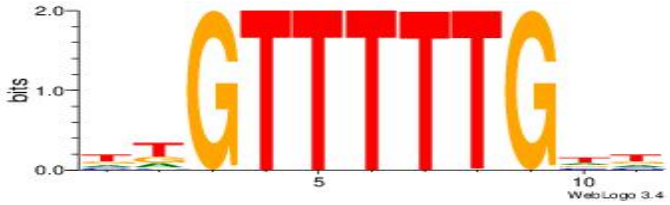
Alignment:

```
HHCAAAAACAH
DDTAAWAAHH-
```

Original motif Consensus sequence: HHCAAAAACAH



Reverse complement motif Consensus sequence: HTGTTTTTGHH



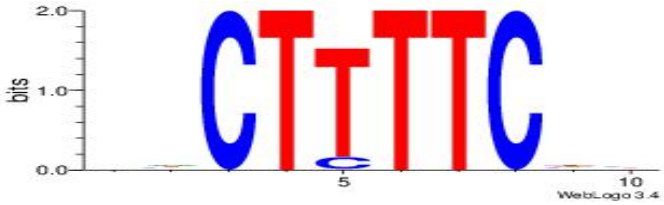
Dataset #:	4
Motif ID:	68

Motif name:	dwCTTTTCwy
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0422443

Alignment:

```
DHCTTTTCHH
HHTTWTTADD
```

Original motif Consensus sequence: DHCTTTTCHH



Reverse complement motif Consensus sequence: DHGAAAAGHD

Dataset #:	4
Motif ID:	74
Motif name:	twTACATAvw
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0437545

Alignment:
DBTATGTAHH
HHTTWTTADD

Original motif Consensus sequence: HHTACATAVD

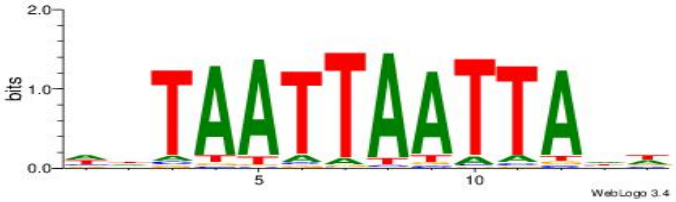
Reverse complement motif Consensus sequence: DBTATGTAHH

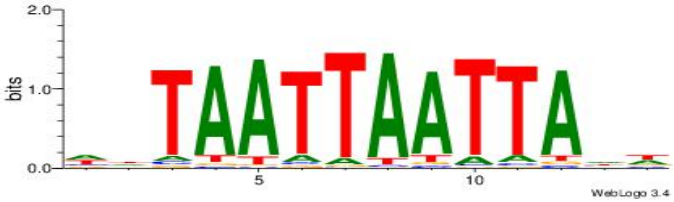
Dataset #:	4
Motif ID:	98
Motif name:	wwTAATTAATTAww
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	10
Similarity score:	0.0451418

Alignment:
DHTAATTAATTADH
HHTTWTTADD----

Original motif Consensus sequence: HDTAATTAATTAHD

Reverse complement motif Consensus sequence: DHTAATTAATTADH





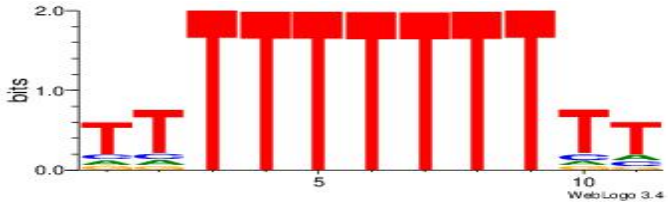
Dataset #:	4
Motif ID:	102
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0493427

Alignment:

```
TTTTTTTTTTT
-HHTTWTTADD
```

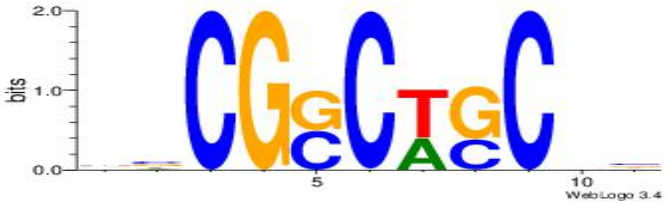
Original motif Consensus sequence: AAAAAAAAAAA

Reverse complement motif Consensus sequence: TTTTTTTTTTT



Dataset #: 4 Motif ID: 90 Motif name: ssCGsCwsCss

Original motif Consensus sequence: BBCGSCWSCBB



Reverse complement motif Consensus sequence: BBGSWGSCGBB

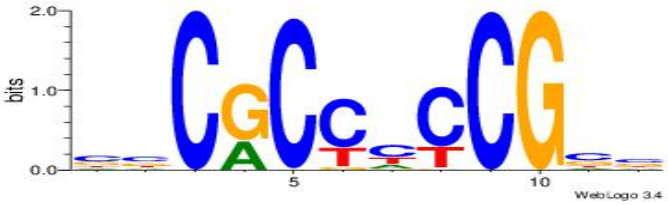
Best Matches for Significant Motif ID 90 (Highest to Lowest)

Dataset #:	4
Motif ID:	88
Motif name:	ssCrCYyYCGss
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:	0.0236246

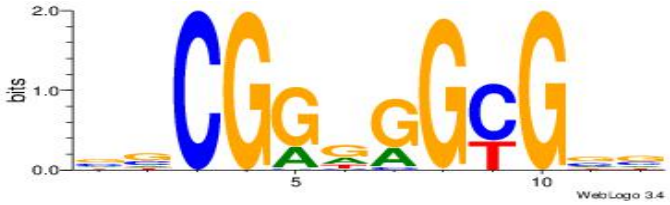
Alignment:

```
BBCGGKGGMGBB
-BBGSWGSCGBB
```

Original motif Consensus sequence: BBCRCCYCCGBB



Reverse complement motif Consensus sequence: BBCGGKGGMGBB



Dataset #:	4
Motif ID:	89
Motif name:	ccCCmCACCcc
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0238413

Alignment:

```
DDGGTGRGGBD
BBGSWGSCGBB
```

Original motif Consensus sequence: HBCCMCACCHH

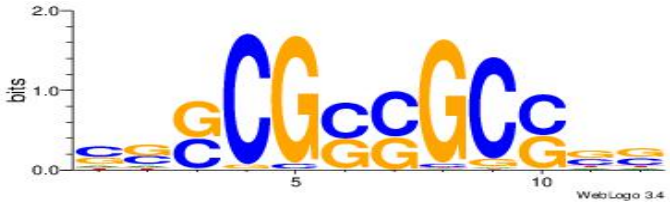
Reverse complement motif Consensus sequence: DDGGTGRGGBD

Dataset #:	4
Motif ID:	78
Motif name:	sssCGssGCsss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	11

Similarity score: 0.0239515

Alignment:
SSSCGSSGCSSS
-BBCGSCWSCBB

Original motif Consensus sequence: SSSCGSSGCSSS



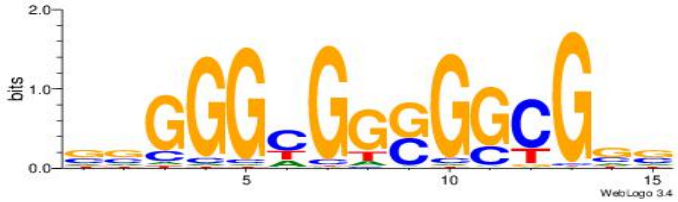
Reverse complement motif Consensus sequence: SSSGCSSCGSSS

Dataset #: 4
Motif ID: 91
Motif name: ssCGCCsCCrCCCss
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 1
Number of overlap: 11
Similarity score: 0.0274779

Alignment:
SSGGGCGGSGGCGSS
----BBGSWGSCGBB

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS



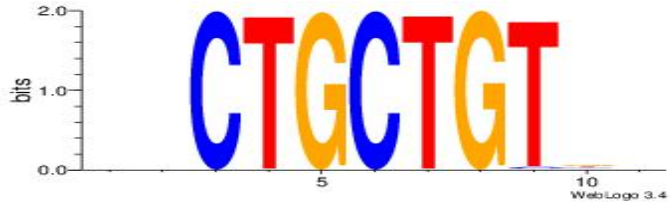
Dataset #:	4
Motif ID:	82
Motif name:	rmACAGCAGsr
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0336118

Alignment:

```
DVCTGCTGTVB
BBCGSCWSCBB
```

Original motif Consensus sequence: VVACAGCAGVD

Reverse complement motif Consensus sequence: DVCTGCTGTVB



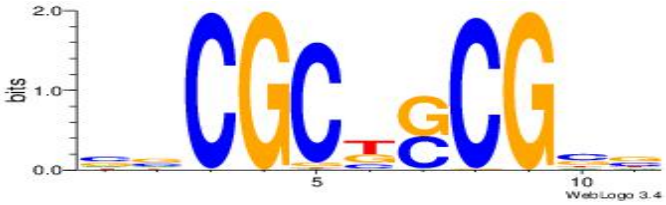
Dataset #:	4
Motif ID:	94

Motif name:	ssCGCksCGss
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:	0.0337912

Alignment:

```
VVCGCKSCGBB
BBGSWGSCGBB
```

Original motif Consensus sequence: VVCGCKSCGBB



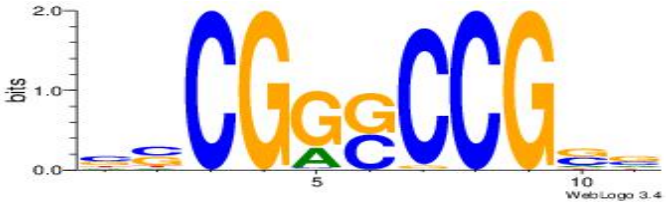
Reverse complement motif Consensus sequence: BBCGSRGCGVV

Dataset #:	4
Motif ID:	87
Motif name:	ssCGGsYCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0346171

Alignment:
BSCGGSCCGSV
BBCGSCWSCBB

Original motif Consensus sequence: BSCGGSCCGSV

Reverse complement motif Consensus sequence: VSCGGSCCGSB

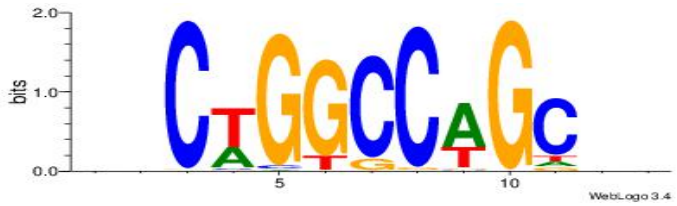


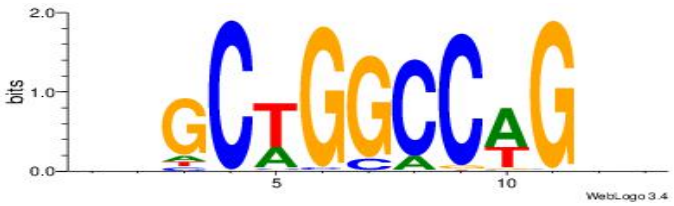
Dataset #:	4
Motif ID:	80
Motif name:	ssCwGGCCwGCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.0353683

Alignment:
BBGCTGGCCWGBB
BBGSWGSCGBB--

Original motif Consensus sequence: BBCWGGCCAGCBB

Reverse complement motif Consensus sequence: BBGCTGGCCWGBB



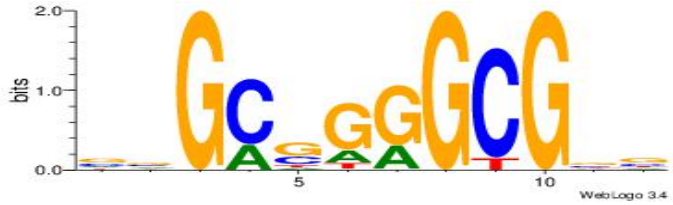


Dataset #:	4
Motif ID:	67
Motif name:	ssGMsGRGCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.0362688

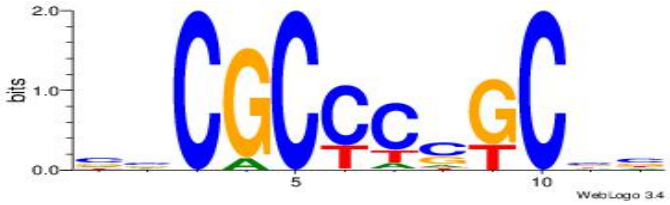
Alignment:

```
BBCGCCCSGCVV
-BBCGSCWSCBB
```

Original motif Consensus sequence: VVGCSGGGCGBB



Reverse complement motif Consensus sequence: BBCGCCCSGCVV



Dataset #:	4
Motif ID:	72

Motif name:	ssCKCwsCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0409983

Alignment:

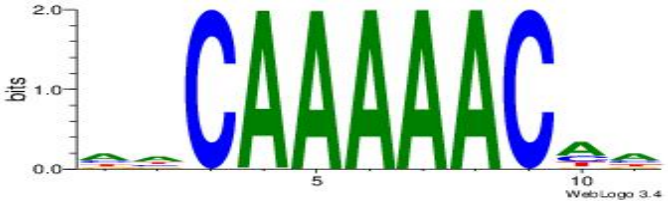
```
VBCGSWGCGVB
BBCGSCWSCBB
```

Original motif Consensus sequence: BVCGCWSCGBV

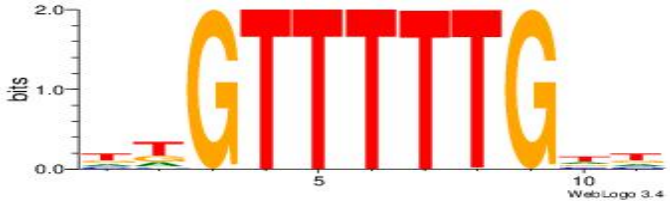
Reverse complement motif Consensus sequence: VBCGSWGCGVB

Dataset #: 4 Motif ID: 86 Motif name: aaCAAAAACaa

Original motif Consensus sequence: HHCAAAAACAH



Reverse complement motif Consensus sequence: HTGTTTTTGHH



Best Matches for Significant Motif ID 86 (Highest to Lowest)

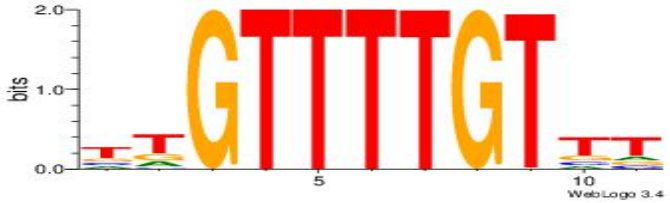
Dataset #:	4
Motif ID:	69
Motif name:	aaACAAAACaa
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.00599723

Alignment:

```
TTGTTTTGTTT
HTGTTTTTGHH
```

Original motif Consensus sequence: AAACAAAACAA

Reverse complement motif Consensus sequence: TTGTTTTGTTT

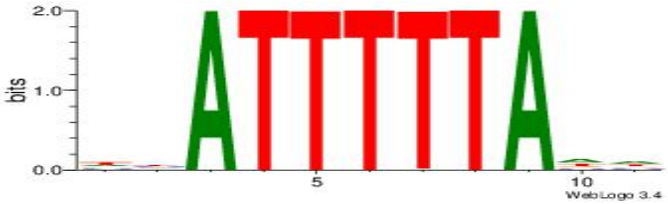


Dataset #:	4
Motif ID:	85
Motif name:	wtATTTTTAww
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11

Similarity score: 0.0144021

Alignment:
DDTAAAAATHD
HHCAAAAACAH

Original motif Consensus sequence: DHATTTTTADD



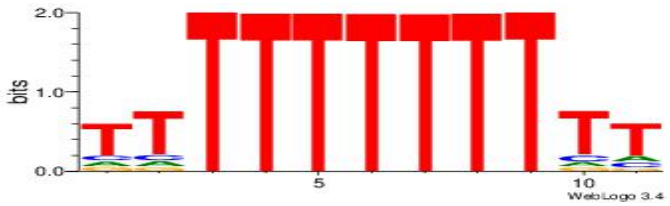
Reverse complement motif Consensus sequence: DDTAAAAATHD

Dataset #: 4
Motif ID: 102
Motif name: AAAAAAAAAAA
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 1
Number of overlap: 11
Similarity score: 0.0192906

Alignment:
TTTTTTTTTTT
HTGTTTTTGHH

Original motif Consensus sequence: AAAAAAAAAAA

Reverse complement motif Consensus sequence: TTTTTTTTTTT

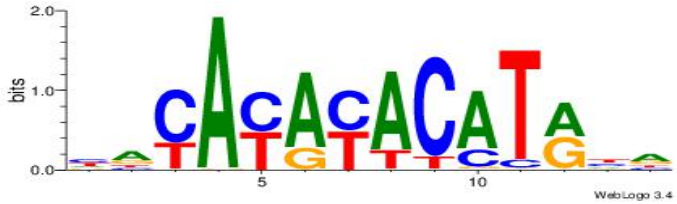


Dataset #:	4
Motif ID:	75
Motif name:	yayAyAyACATrya
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	11
Similarity score:	0.0258087

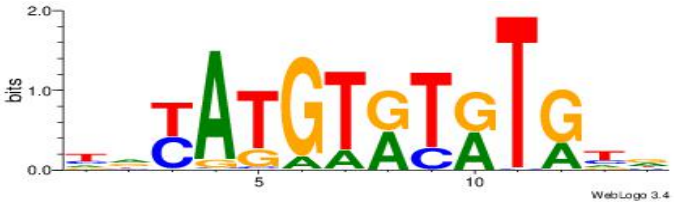
Alignment:

```
DHKATGTKTKTGTD
---HTGTTTTTGHH
```

Original motif Consensus sequence: HACAYAYACATRHD



Reverse complement motif Consensus sequence: DHKATGTKTKTGT



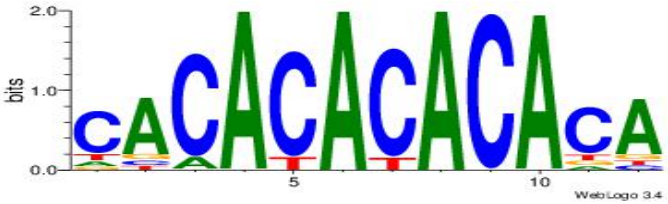
Dataset #:	4
Motif ID:	79

Motif name:	CACACACACACA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.0409728

Alignment:

```
TGTGTGTGTGTG
-HTGTTTTTGHH
```

Original motif Consensus sequence: CACACACACACA

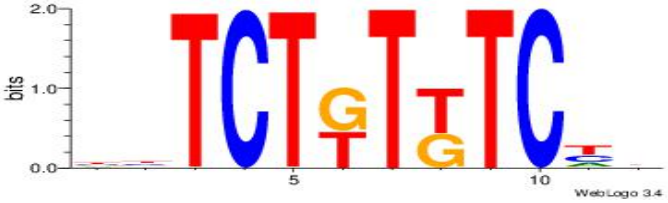


Reverse complement motif Consensus sequence: TGTGTGTGTGTG

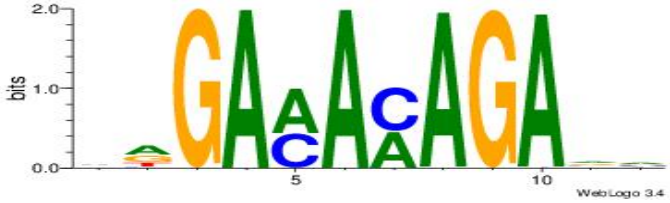
Dataset #:	4
Motif ID:	92
Motif name:	tyTCTkTkTCyy
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.0416867

Alignment:
BBTCTKTKTCHB
-HTGTTTTTGHH

Original motif Consensus sequence: BBTCTKTKTCHB



Reverse complement motif Consensus sequence: VHGARAYAGAVV

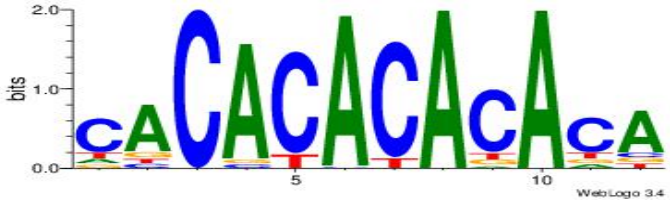


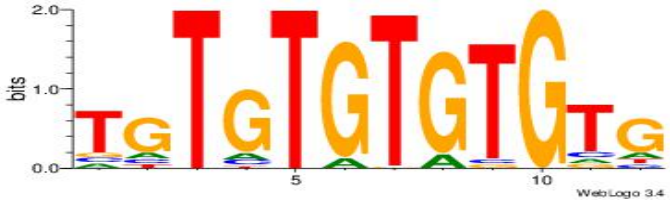
Dataset #:	4
Motif ID:	95
Motif name:	CACACACACACA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.0421933

Alignment:
TGTGTGTGTGTG
-HTGTTTTTGHH

Original motif Consensus sequence: CACACACACACA

Reverse complement motif Consensus sequence: TGTGTGTGTGTG



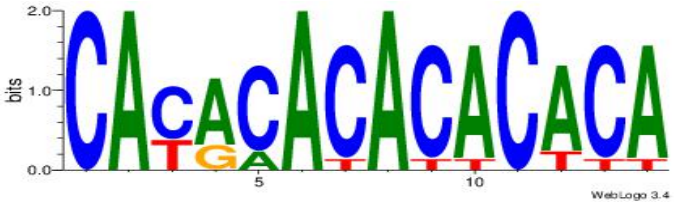


Dataset #:	2
Motif ID:	27
Motif name:	Motif 27
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.0439692

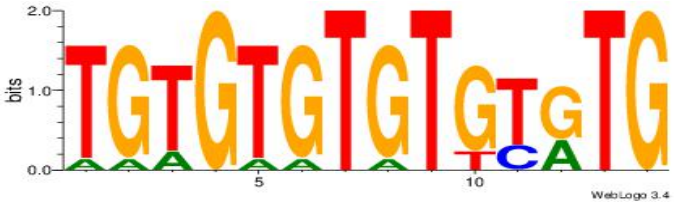
Alignment:

```
TGTGTGTGTGTKTG
-HTGTTTTTGHH--
```

Original motif Consensus sequence: CAYACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTKT



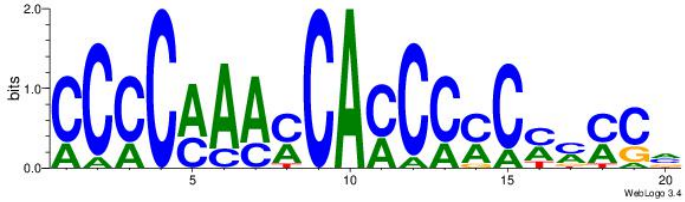
Dataset #:	3
Motif ID:	34

Motif name:	RREB1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.0504266

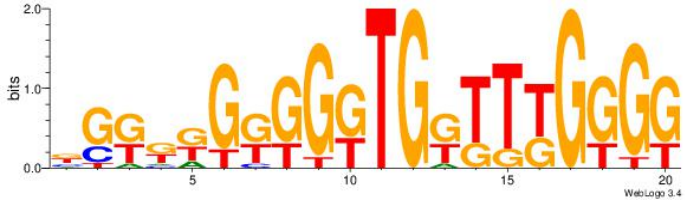
Alignment:

```
CCCCMAAMCAMCCMCMMMCV
------HHCAAAAACAH---
```

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



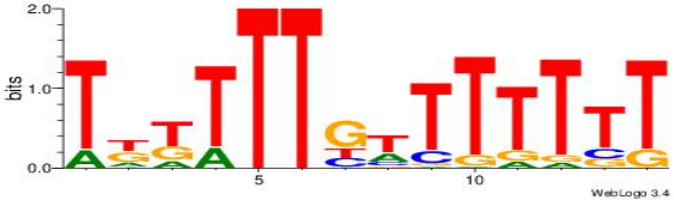
Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG



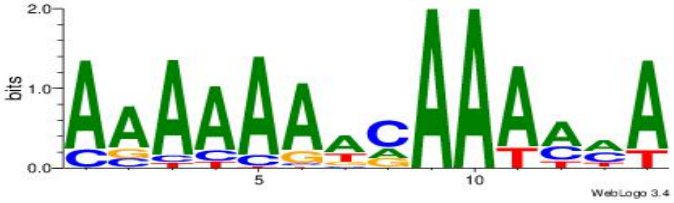
Dataset #:	2
Motif ID:	26
Motif name:	Motif 26
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.0546799

Alignment:
AAAAAAACAAARRA
HHCAAAAACAH---

Original motif Consensus sequence: TKKTTTGTTTTTTT



Reverse complement motif Consensus sequence: AAAAAAACAAARR

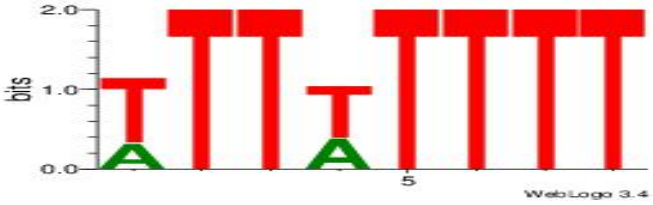


Best Matches for Each Motif (Highest to Lowest)

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

Original motif Consensus sequence: AAAAWAAA

Reverse complement motif Consensus sequence: TTTWTTTT



Best Matches for Motif ID 1 (Highest to Lowest)

Dataset #:	4
Motif ID:	102

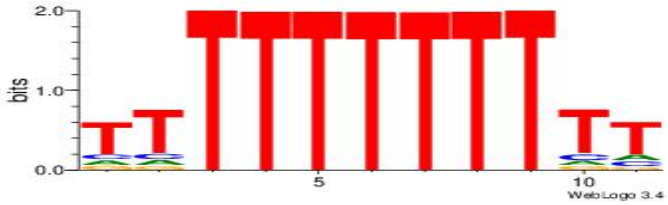
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	8
Similarity score:	0

Alignment:

```
AAAAAAAAAAA
--AAAAWAAA-
```

Original motif Consensus sequence: AAAAAAAAAAA

Reverse complement motif Consensus sequence: TTTTTTTTTTT

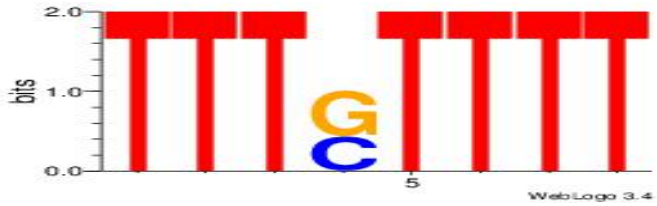


Dataset #:	1
Motif ID:	5
Motif name:	Motif 5
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	8
Similarity score:	0.0225461

Alignment:
AAAASAAA
AAAAWAAA

Original motif Consensus sequence: AAAASAAA

Reverse complement motif Consensus sequence: TTTSTTTT

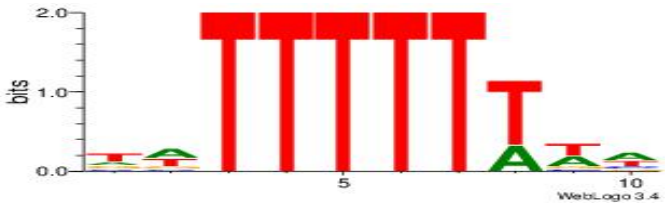


Dataset #:	4
Motif ID:	76
Motif name:	wwWAAAAAwa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	8
Similarity score:	0.0315844

Alignment:
WWAAAAAAWH
-AAAAWAAA-

Original motif Consensus sequence: WWAAAAAAWH

Reverse complement motif Consensus sequence: HWTTTTTTWW

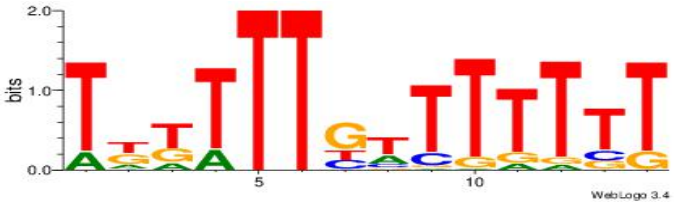


Dataset #:	2
Motif ID:	26
Motif name:	Motif 26
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.0405545

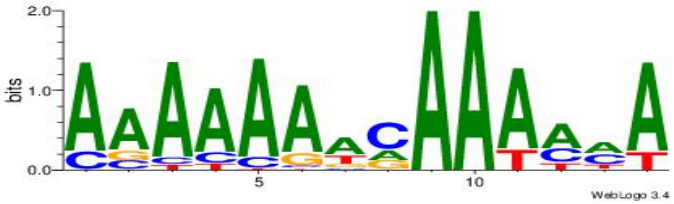
Alignment:

```
TKKTTTGTTTTTTT
---TTTWTTTT---
```

Original motif Consensus sequence: TKKTTTGTTTTTTT



Reverse complement motif Consensus sequence: AAAAAAACAAARR



Dataset #:	4
Motif ID:	81

Motif name:	wwTAAwAAww
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	8
Similarity score:	0.0501043

Alignment:

```
DDTAAWAAHH
-AAAAWAAA-
```

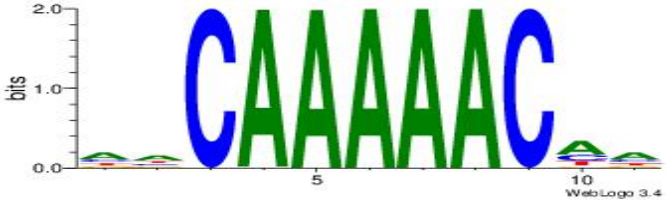
Original motif Consensus sequence: DDTAAWAAHH

Reverse complement motif Consensus sequence: HHTTWTTADD

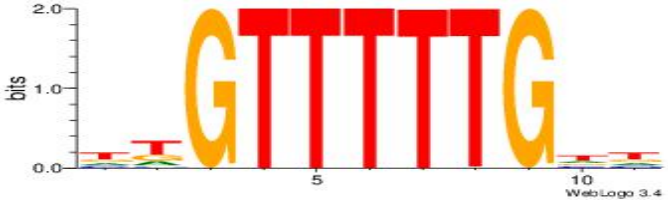
Dataset #:	4
Motif ID:	86
Motif name:	aaCAAAAACaa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	8
Similarity score:	0.0508706

Alignment:
HHCAAAAACAH
---AAAAWAAA

Original motif Consensus sequence: HHCAAAAACAH



Reverse complement motif Consensus sequence: HTGTTTTTGHH

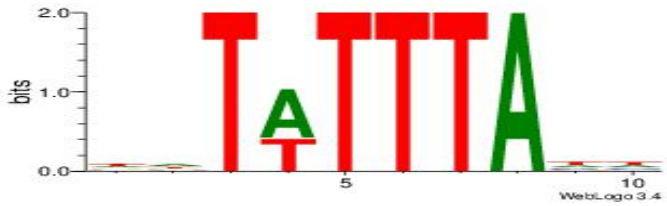


Dataset #:	4
Motif ID:	83
Motif name:	wwTAAAwAww
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	8
Similarity score:	0.0533374

Alignment:
HHTWTTTADD
TTTWTTTT--

Original motif Consensus sequence: DDTAAAWAHH

Reverse complement motif Consensus sequence: HHTWTTTADD

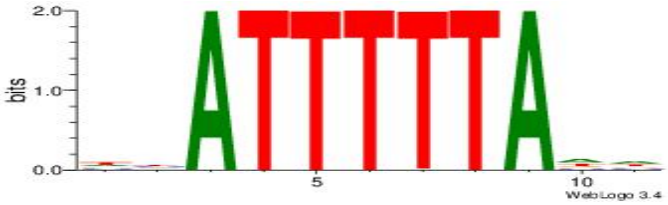


Dataset #:	4
Motif ID:	85
Motif name:	wtATTTTTAww
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	8
Similarity score:	0.0555652

Alignment:

```
DHATTTTTADD
TTTWTTTT---
```

Original motif Consensus sequence: DHATTTTTADD



Reverse complement motif Consensus sequence: DDTAAAAATHD

Dataset #:	4
Motif ID:	69

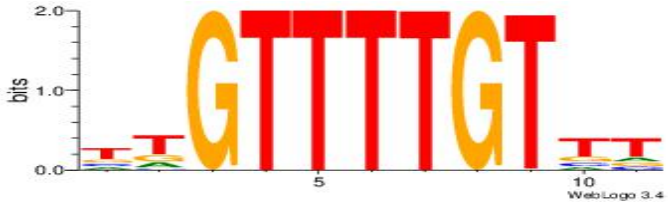
Motif name:	aaACAAAACaa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.0594787

Alignment:

```
AAACAAAACAA
AAAAWAAA---
```

Original motif Consensus sequence: AAACAAAACAA

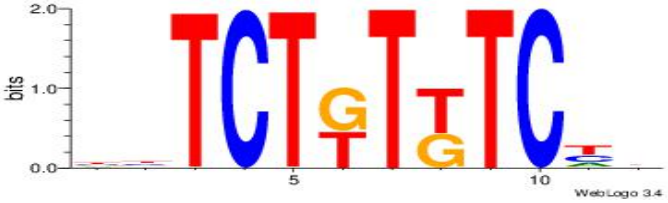
Reverse complement motif Consensus sequence: TTGTTTTGTTT



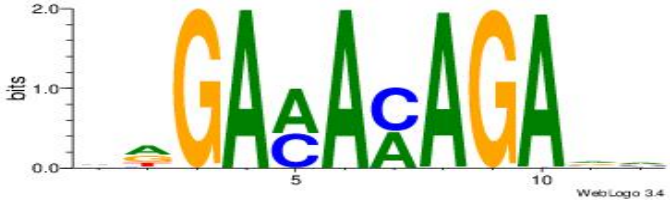
Dataset #:	4
Motif ID:	92
Motif name:	tyTCTkTkTCyy
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.0715604

Alignment:
BBTCTKTKTCHB
-TTTWTTTT---

Original motif Consensus sequence: BBTCTKTKTCHB



Reverse complement motif Consensus sequence: VHGARAYAGAVV

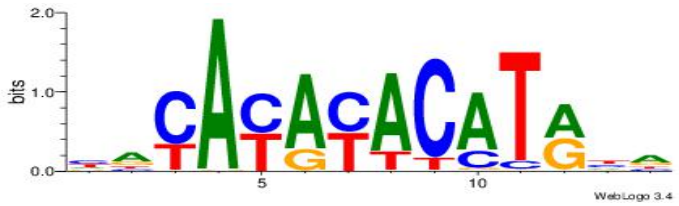


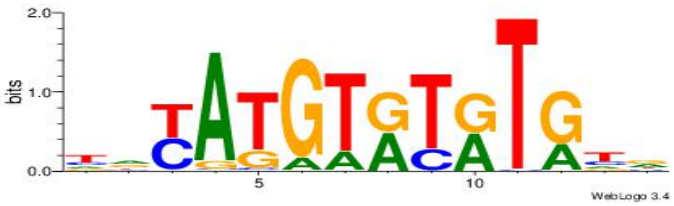
Dataset #:	4
Motif ID:	75
Motif name:	yayAyAyACATrya
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	8
Similarity score:	0.0815577

Alignment:
DHKATGTKTKTGTD
------TTTWTTTT

Original motif Consensus sequence: HACAYAYACATRHD

Reverse complement motif Consensus sequence: DHKATGTKTKTGT





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

Original motif Consensus sequence: CACACACA

Reverse complement motif Consensus sequence: TGTGTGTG

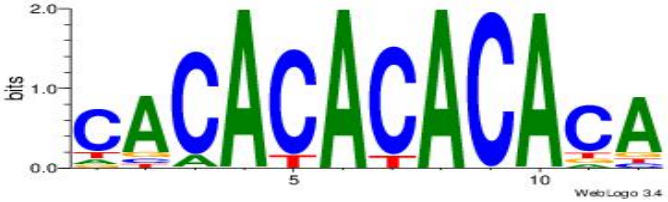
Best Matches for Motif ID 2 (Highest to Lowest)

Dataset #:	4
Motif ID:	79
Motif name:	CACACACACACA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	8
Similarity score:	0.00486551

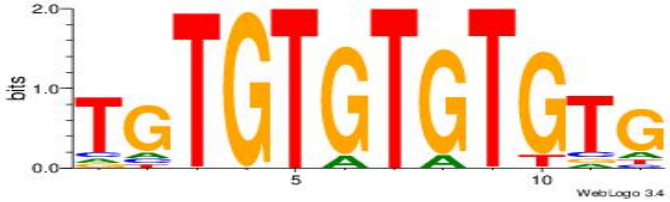
Alignment:

```
CACACACACACA
--CACACACA--
```

Original motif Consensus sequence: CACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTG

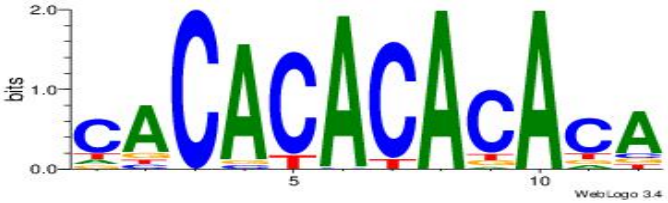


Dataset #:	4
Motif ID:	95
Motif name:	CACACACACACA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	8
Similarity score:	0.0100991

Alignment:

```
TGTGTGTGTGTG
----TGTGTGTG
```

Original motif Consensus sequence: CACACACACACA



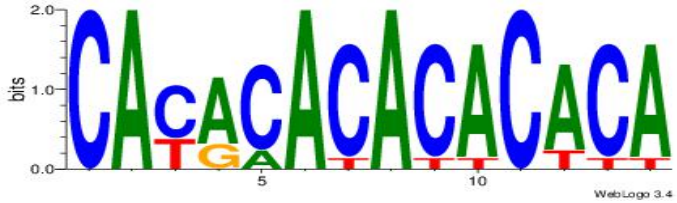
Reverse complement motif Consensus sequence: TGTGTGTGTGTG

Dataset #:	2
Motif ID:	27
Motif name:	Motif 27
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	8
Similarity score:	0.0101254

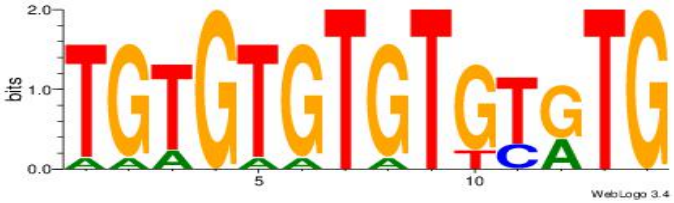
Alignment:

```
CAYACACACACACA
----CACACACA--
```

Original motif Consensus sequence: CAYACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTKT



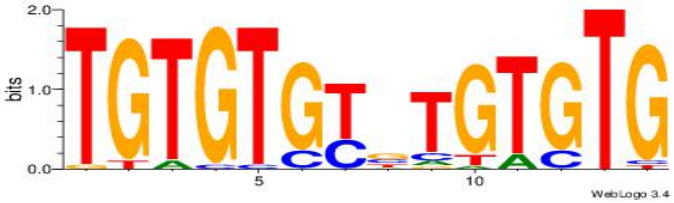
Dataset #:	2
Motif ID:	25
Motif name:	Motif 25
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	8

Similarity score: 0.0226631

Alignment:
TGTGTGKVTGTGTG
TGTGTGTG------

Original motif Consensus sequence: CACACAVRCACACA

Reverse complement motif Consensus sequence: TGTGTGKVTGTGT

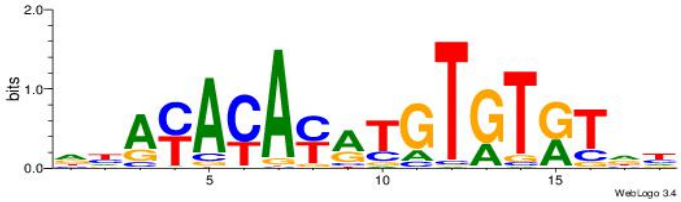


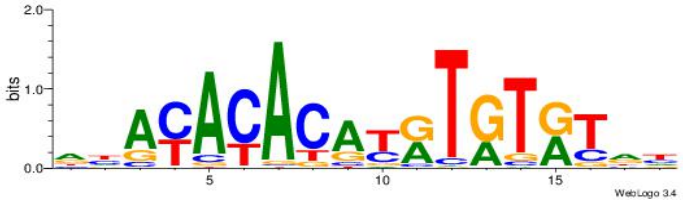
Dataset #: 4
Motif ID: 97
Motif name: ryayAyAyrtGTRTrTry
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 2
Number of overlap: 8
Similarity score: 0.0393219

Alignment:
DHAYAYAYRTGTGTRTDH
---------TGTGTGTG-

Original motif Consensus sequence: DHAYAYAYRTGTGTRTDH

Reverse complement motif Consensus sequence: HDAMACACAKKTKTKTHD



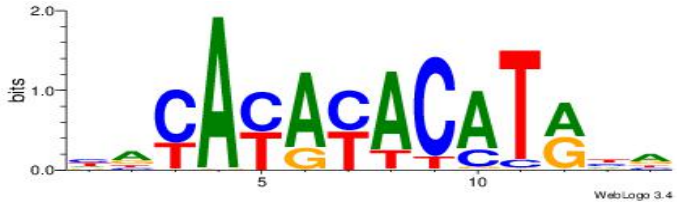


Dataset #:	4
Motif ID:	75
Motif name:	yayAyAyACATrya
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	8
Similarity score:	0.0468047

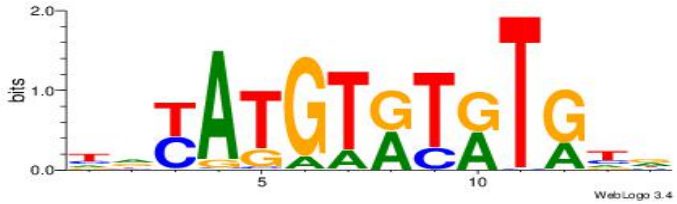
Alignment:

```
HACAYAYACATRHD
--CACACACA----
```

Original motif Consensus sequence: HACAYAYACATRHD



Reverse complement motif Consensus sequence: DHKATGTKTKTGT



Dataset #:	4
Motif ID:	86

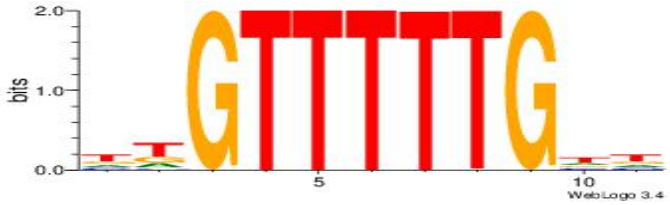
Motif name:	aaCAAAAACaa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	8
Similarity score:	0.0633924

Alignment:

```
HHCAAAAACAH
--CACACACA-
```

Original motif Consensus sequence: HHCAAAAACAH

Reverse complement motif Consensus sequence: HTGTTTTTGHH



Dataset #:	4
Motif ID:	74
Motif name:	twTACATAvw
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	8
Similarity score:	0.0691437

Alignment:
DBTATGTAHH
TGTGTGTG--

Original motif Consensus sequence: HHTACATAVD

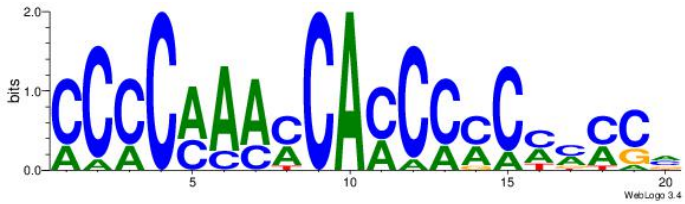
Reverse complement motif Consensus sequence: DBTATGTAHH

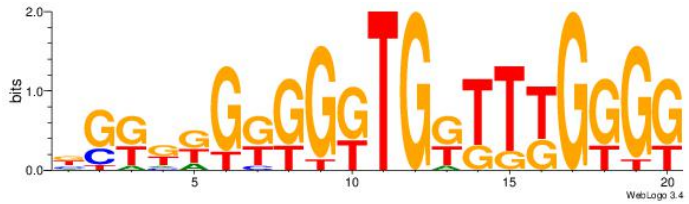
Dataset #:	3
Motif ID:	34
Motif name:	RREB1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	7
Number of overlap:	8
Similarity score:	0.0752394

Alignment:
CCCCMAAMCAMCCMCMMMCV
------CACACACA------

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV

Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG



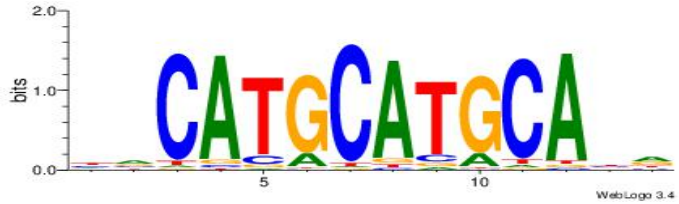


Dataset #:	4
Motif ID:	101
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	8
Similarity score:	0.0764586

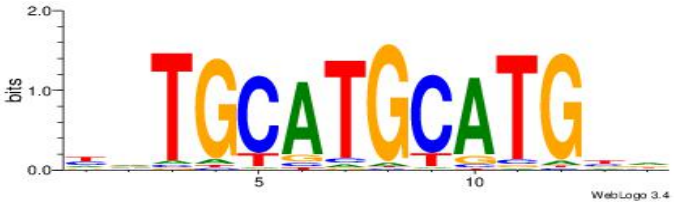
Alignment:

```
DVTGCATGCATGBH
------TGTGTGTG
```

Original motif Consensus sequence: HVCATGCATGCABD



Reverse complement motif Consensus sequence: DVTGCATGCATGB



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

Original motif Consensus sequence: AWATAMA

Reverse complement motif Consensus sequence: TYTATWT

Best Matches for Motif ID 3 (Highest to Lowest)

Dataset #:	4
Motif ID:	83
Motif name:	wwTAAAwAww
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:	0.0482178

Alignment:

```
HHTWTTTADD
TYTATWT---
```

Original motif Consensus sequence: DDTAAAWAHH

Reverse complement motif Consensus sequence: HHTWTTTADD

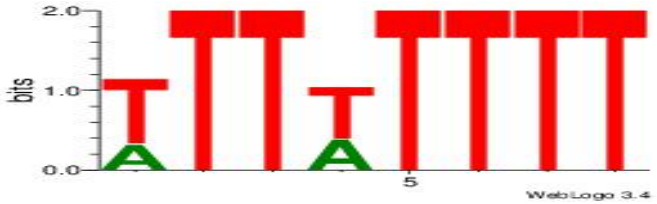
Dataset #:	1
Motif ID:	1
Motif name:	Motif 1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	7
Similarity score:	0.0549847

Alignment:

```
TTTWTTTT
TYTATWT-
```

Original motif Consensus sequence: AAAAWAAA

Reverse complement motif Consensus sequence: TTTWTTTT



Dataset #:	4
Motif ID:	74
Motif name:	twTACATAvw
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	7

Similarity score: 0.0576662

Alignment:
DBTATGTAHH
TYTATWT---

Original motif Consensus sequence: HHTACATAVD

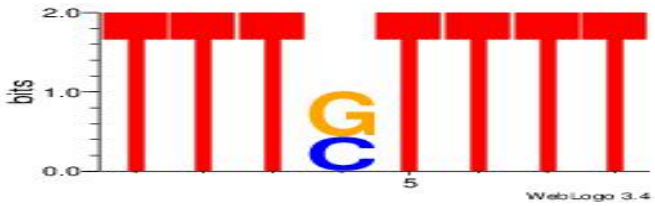
Reverse complement motif Consensus sequence: DBTATGTAHH

Dataset #: 1
Motif ID: 5
Motif name: Motif 5
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: 0.0581758

Alignment:
TTTSTTTT
TYTATWT-

Original motif Consensus sequence: AAAASAAA

Reverse complement motif Consensus sequence: TTTSTTTT



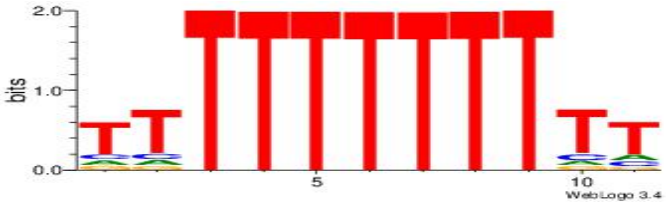
Dataset #:	4
Motif ID:	102
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	7
Similarity score:	0.0581792

Alignment:

```
TTTTTTTTTTT
--TYTATWT--
```

Original motif Consensus sequence: AAAAAAAAAAA

Reverse complement motif Consensus sequence: TTTTTTTTTTT



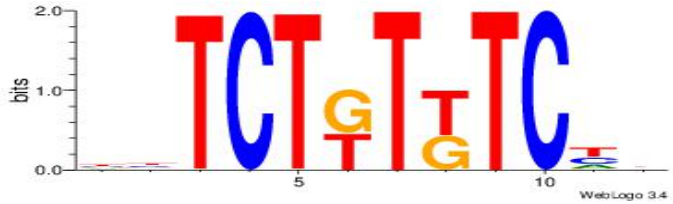
Dataset #:	4
Motif ID:	92

Motif name:	tyTCTkTkTCyy
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	7
Similarity score:	0.061865

Alignment:

```
VHGARAYAGAVV
---AWATAMA--
```

Original motif Consensus sequence: BBTCTKTKTCHB



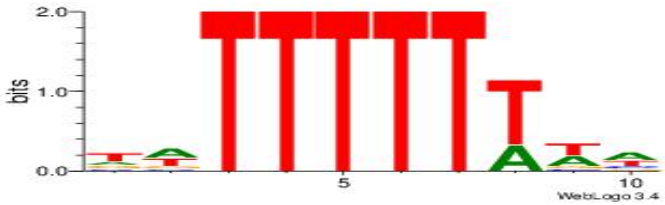
Reverse complement motif Consensus sequence: VHGARAYAGAVV

Dataset #:	4
Motif ID:	76
Motif name:	wwWAAAAAwa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	7
Similarity score:	0.0673905

Alignment:
WWAAAAAAWH
---AWATAMA

Original motif Consensus sequence: WWAAAAAAWH

Reverse complement motif Consensus sequence: HWTTTTTTWW

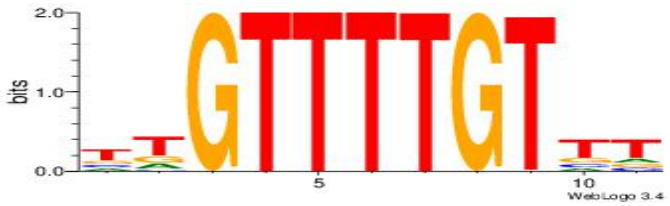


Dataset #:	4
Motif ID:	69
Motif name:	aaACAAAACaa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	7
Similarity score:	0.0713162

Alignment:
AAACAAAACAA
AWATAMA----

Original motif Consensus sequence: AAACAAAACAA

Reverse complement motif Consensus sequence: TTGTTTTGTTT

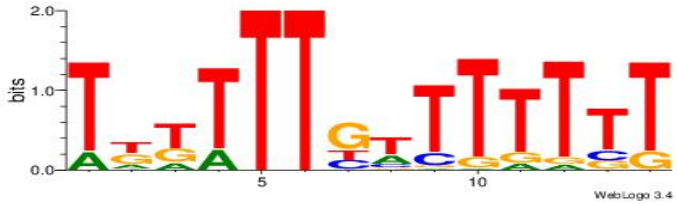


Dataset #:	2
Motif ID:	26
Motif name:	Motif 26
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	7
Similarity score:	0.0754383

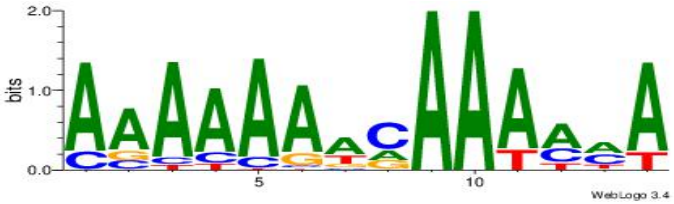
Alignment:

```
AAAAAAACAAARRA
--AWATAMA-----
```

Original motif Consensus sequence: TKKTTTGTTTTTTT



Reverse complement motif Consensus sequence: AAAAAAACAAARR



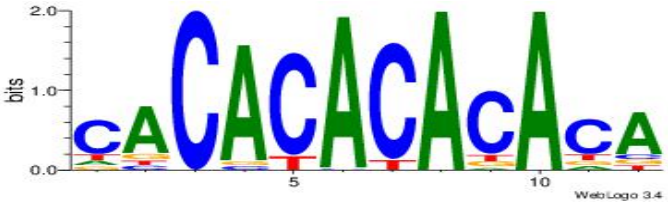
Dataset #:	4
Motif ID:	95

Motif name:	CACACACACACA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	7
Similarity score:	0.0767049

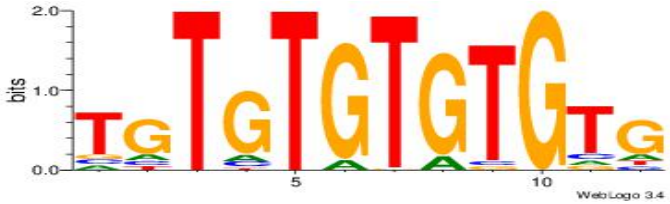
Alignment:

```
CACACACACACA
---AWATAMA--
```

Original motif Consensus sequence: CACACACACACA

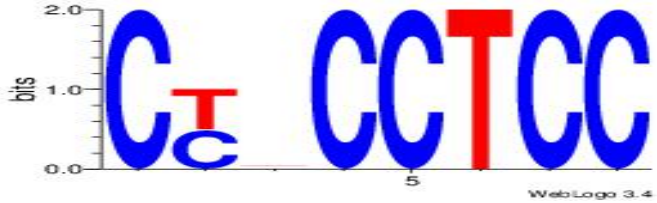


Reverse complement motif Consensus sequence: TGTGTGTGTGTG



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

Original motif Consensus sequence: CYBCCTCC



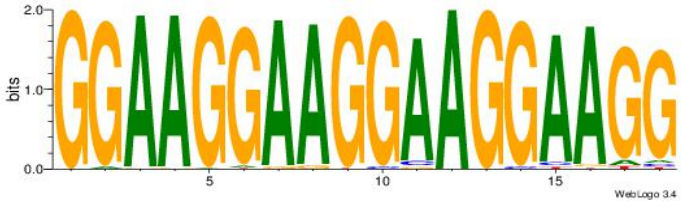
Reverse complement motif Consensus sequence: GGAGGVMG

Best Matches for Motif ID 4 (Highest to Lowest)

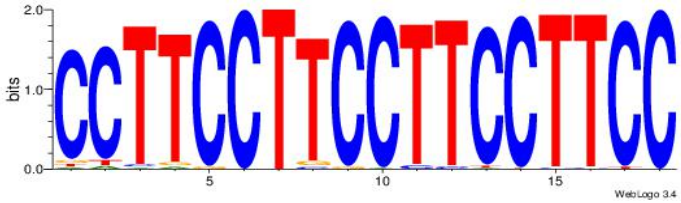
Dataset #:	3
Motif ID:	48
Motif name:	EWSR1-FLI1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	8
Similarity score:	0.022644

Alignment:
GGAAGGAAGGAAGGAAGG
-----GGAGGVMG-----

Original motif Consensus sequence: GGAAGGAAGGAAGGAAGG



Reverse complement motif Consensus sequence: CCTTCCTTCCTTCCTTCC

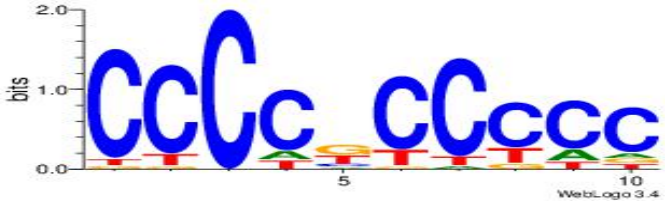


Dataset #:	3
Motif ID:	32
Motif name:	SP1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3

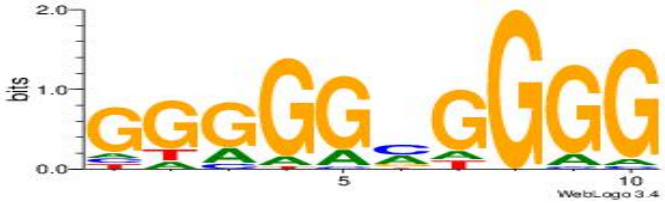
Number of overlap: 8
Similarity score: 0.0247246

Alignment:
CCCCKCCCCC
--CYBCCTCC

Original motif Consensus sequence: CCCCKCCCCC



Reverse complement motif Consensus sequence: GGGGGYGGGG

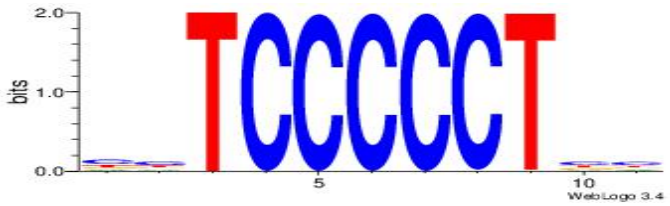


Dataset #: 4
Motif ID: 93
Motif name: rrAGGGGGArr
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 1
Number of overlap: 8
Similarity score: 0.0300296

Alignment:
VVTCCCCCTVV
---CYBCCTCC

Original motif Consensus sequence: VVAGGGGGAVV

Reverse complement motif Consensus sequence: VVTCCCCCTVV



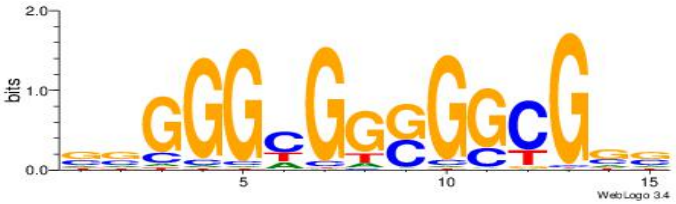
Dataset #:	4
Motif ID:	91
Motif name:	ssCGCCsCCrCCCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	8
Similarity score:	0.0335629

Alignment:

```
SSCGCCSCCGCCCSS
----CYBCCTCC---
```

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS



Dataset #:	3

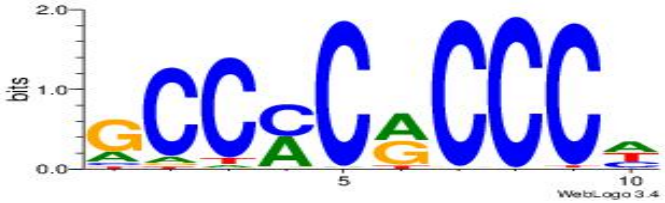
Motif ID:	52
Motif name:	Klf4
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	8
Similarity score:	0.0354458

Alignment:

```
GCCYCMCCCD
-CYBCCTCC-
```

Original motif Consensus sequence: DGGGYGKGGC

Reverse complement motif Consensus sequence: GCCYCMCCCD



Dataset #:	1
Motif ID:	11
Motif name:	Motif 11
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	8
Similarity score:	0.0389582

Alignment:
CCGCCGCC
CYBCCTCC

Original motif Consensus sequence: CCGCCGCC

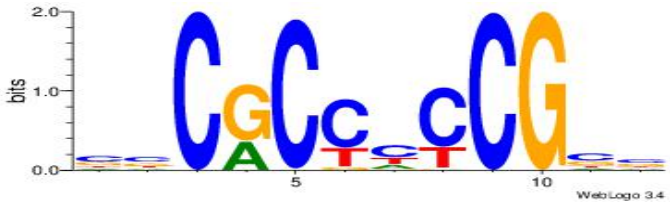
Reverse complement motif Consensus sequence: GGCGGCGG

Dataset #:	4
Motif ID:	88
Motif name:	ssCrCYyYCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	8
Similarity score:	0.045829

Alignment:
BBCRCCYCCGBB
----CYBCCTCC

Original motif Consensus sequence: BBCRCCYCCGBB

Reverse complement motif Consensus sequence: BBCGGKGGMGBB

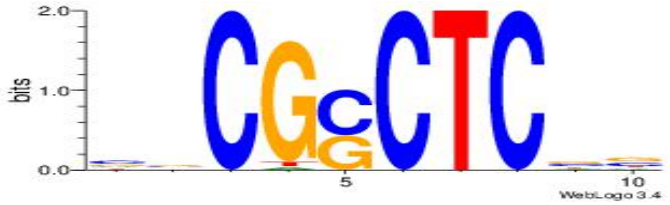


Dataset #:	4
Motif ID:	73
Motif name:	ssCGsCTCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	8
Similarity score:	0.0472644

Alignment:

```
VVCGSCTCBB
-CYBCCTCC-
```

Original motif Consensus sequence: VVCGSCTCBB



Reverse complement motif Consensus sequence: BBGAGSCGVV

Dataset #:	3
Motif ID:	57

Motif name:	MZF1_5-13
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	8
Similarity score:	0.049303

Alignment:

```
BTHCCCCTYB
--CYBCCTCC
```

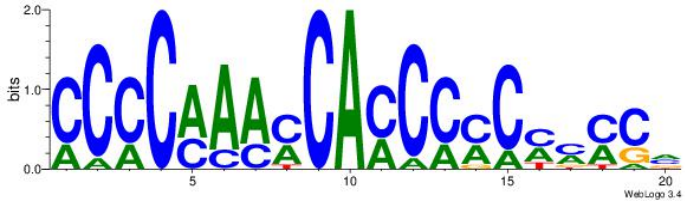
Original motif Consensus sequence: BKAGGGGDAD

Reverse complement motif Consensus sequence: BTHCCCCTYB

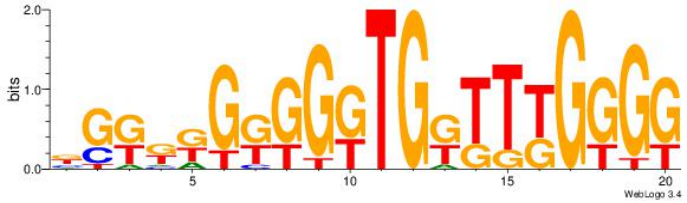
Dataset #:	3
Motif ID:	34
Motif name:	RREB1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	8
Similarity score:	0.0528666

Alignment:
BGRRRGRGGRTGRTTYGGGG
----GGAGGVMG--------

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



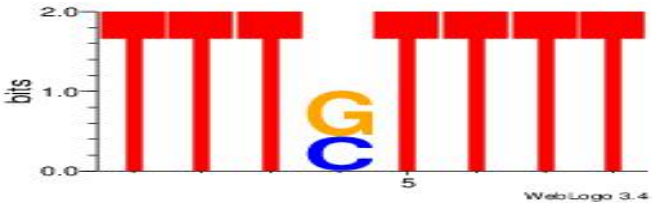
Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG



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

Original motif Consensus sequence: AAAASAAA

Reverse complement motif Consensus sequence: TTTSTTTT



Best Matches for Motif ID 5 (Highest to Lowest)

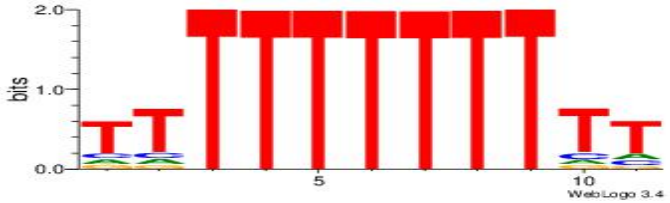
Dataset #:	4
Motif ID:	102
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward

Position number: 2
Number of overlap: 8
Similarity score: 0.0150663

Alignment:
AAAAAAAAAAA
-AAAASAAA--

Original motif Consensus sequence: AAAAAAAAAAA

Reverse complement motif Consensus sequence: TTTTTTTTTTT

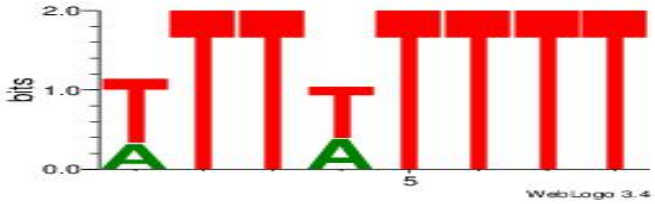


Dataset #: 1
Motif ID: 1
Motif name: Motif 1
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 1
Number of overlap: 8
Similarity score: 0.0155771

Alignment:
TTTWTTTT
TTTSTTTT

Original motif Consensus sequence: AAAAWAAA

Reverse complement motif Consensus sequence: TTTWTTTT

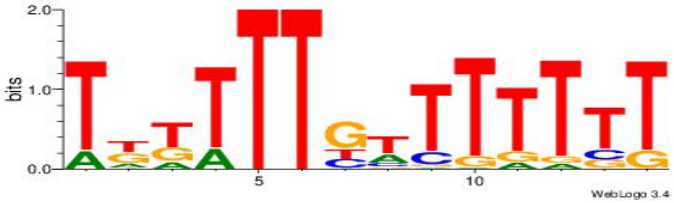


Dataset #:	2
Motif ID:	26
Motif name:	Motif 26
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.020143

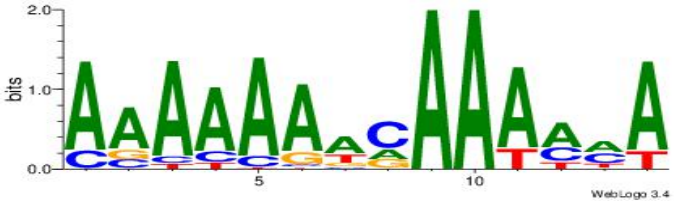
Alignment:

```
AAAAAAACAAARRA
---AAAASAAA---
```

Original motif Consensus sequence: TKKTTTGTTTTTTT



Reverse complement motif Consensus sequence: AAAAAAACAAARR



Dataset #:	4

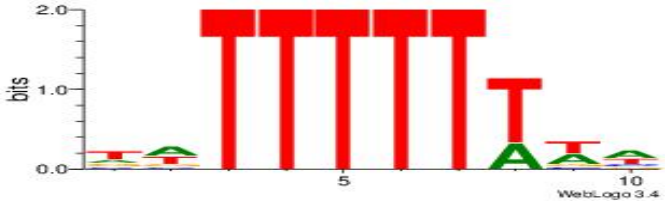
Motif ID:	76
Motif name:	wwWAAAAAwa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	8
Similarity score:	0.0517621

Alignment:

```
WWAAAAAAWH
--AAAASAAA
```

Original motif Consensus sequence: WWAAAAAAWH

Reverse complement motif Consensus sequence: HWTTTTTTWW

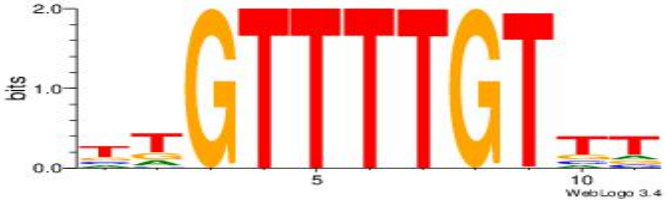


Dataset #:	4
Motif ID:	69
Motif name:	aaACAAAACaa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	8
Similarity score:	0.0633085

Alignment:
AAACAAAACAA
AAAASAAA---

Original motif Consensus sequence: AAACAAAACAA

Reverse complement motif Consensus sequence: TTGTTTTGTTT

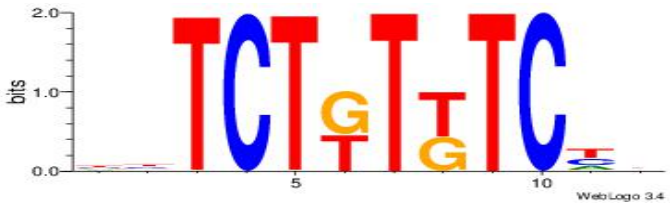


Dataset #:	4
Motif ID:	92
Motif name:	tyTCTkTkTCyy
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	8
Similarity score:	0.0636153

Alignment:
BBTCTKTKTCHB
TTTSTTTT----

Original motif Consensus sequence: BBTCTKTKTCHB

Reverse complement motif Consensus sequence: VHGARAYAGAVV

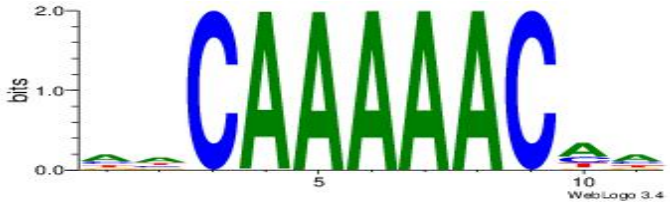


Dataset #:	4
Motif ID:	86
Motif name:	aaCAAAAACaa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	8
Similarity score:	0.0687134

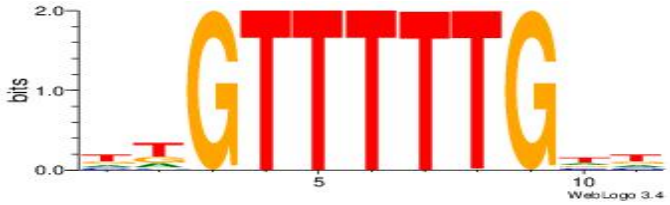
Alignment:

```
HHCAAAAACAH
---AAAASAAA
```

Original motif Consensus sequence: HHCAAAAACAH



Reverse complement motif Consensus sequence: HTGTTTTTGHH



Dataset #:	1
Motif ID:	2

Motif name:	Motif 2
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	8
Similarity score:	0.0740862

Alignment:

```
CACACACA
AAAASAAA
```

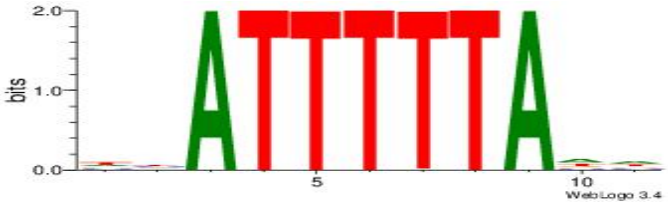
Original motif Consensus sequence: CACACACA

Reverse complement motif Consensus sequence: TGTGTGTG

Dataset #:	4
Motif ID:	85
Motif name:	wtATTTTTAww
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	8
Similarity score:	0.0762618

Alignment:
DDTAAAAATHD
---AAAASAAA

Original motif Consensus sequence: DHATTTTTADD



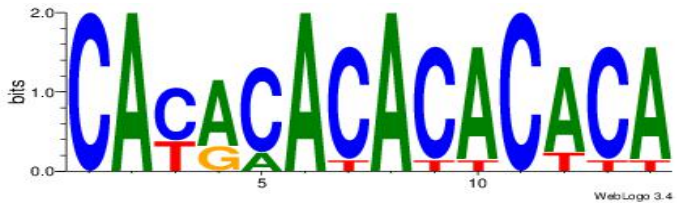
Reverse complement motif Consensus sequence: DDTAAAAATHD

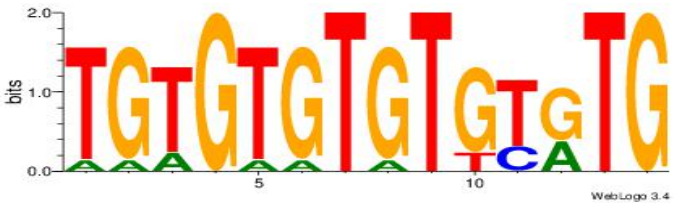
Dataset #:	2
Motif ID:	27
Motif name:	Motif 27
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	8
Similarity score:	0.0769612

Alignment:
TGTGTGTGTGTKTG
------TTTSTTTT

Original motif Consensus sequence: CAYACACACACACA

Reverse complement motif Consensus sequence: TGTGTGTGTGTKT





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

Original motif Consensus sequence: CCCCRCCC

Reverse complement motif Consensus sequence: GGGKGGGG

Best Matches for Motif ID 6 (Highest to Lowest)

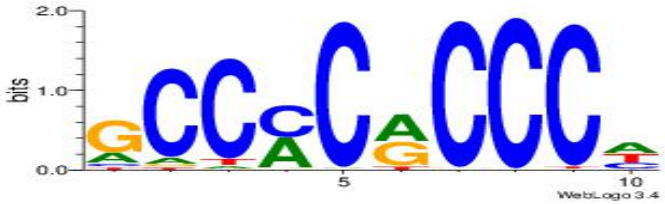
Dataset #:	3
Motif ID:	52
Motif name:	Klf4
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	8
Similarity score:	0.0404318

Alignment:

```
GCCYCMCCCD
-CCCCRCCC-
```

Original motif Consensus sequence: DGGGYGKGGC

Reverse complement motif Consensus sequence: GCCYCMCCCD

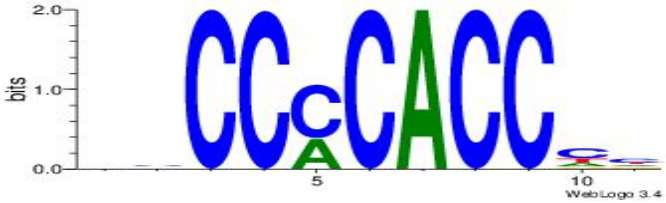


Dataset #:	4
Motif ID:	89
Motif name:	ccCCmCACCcc
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	8
Similarity score:	0.0418011

Alignment:

```
HBCCMCACCHH
--CCCCRCCC-
```

Original motif Consensus sequence: HBCCMCACCHH



Reverse complement motif Consensus sequence: DDGGTGRGGBD

Dataset #:	2
Motif ID:	23
Motif name:	Motif 23
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	8
Similarity score:	0.0476511

Alignment:

GGGGMGGG

GGGKGGGG

Original motif Consensus sequence: CCCRCCCC

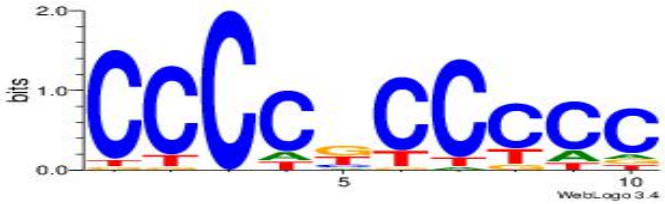
Reverse complement motif Consensus sequence: GGGGMGGG

Dataset #:	3
Motif ID:	32
Motif name:	SP1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	8

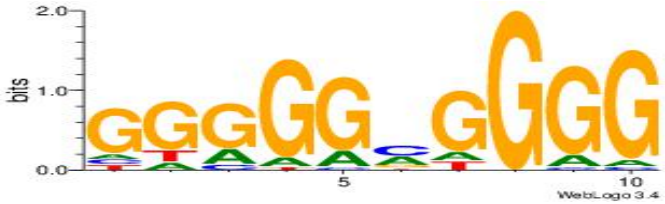
Similarity score: 0.0491071

Alignment:
GGGGGYGGGG
--GGGKGGGG

Original motif Consensus sequence: CCCCKCCCCC



Reverse complement motif Consensus sequence: GGGGGYGGGG

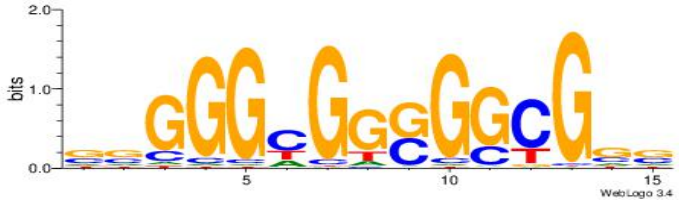


Dataset #: 4
Motif ID: 91
Motif name: ssCGCCsCCrCCCss
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 6
Number of overlap: 8
Similarity score: 0.0491249

Alignment:
SSCGCCSCCGCCCSS
-----CCCCRCCC--

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS



Dataset #:	1
Motif ID:	11
Motif name:	Motif 11
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	8
Similarity score:	0.0723432

Alignment:

GGCGGCGG

GGGKGGGG

Original motif Consensus sequence: CCGCCGCC

Reverse complement motif Consensus sequence: GGCGGCGG

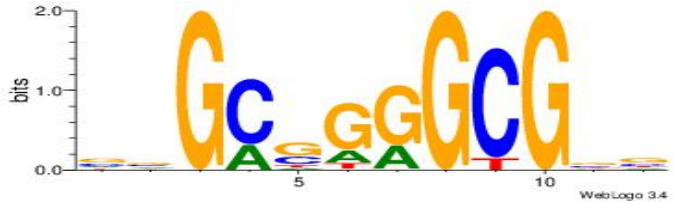
Dataset #:	4
Motif ID:	67

Motif name:	ssGMsGRGCGss
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:	0.0784423

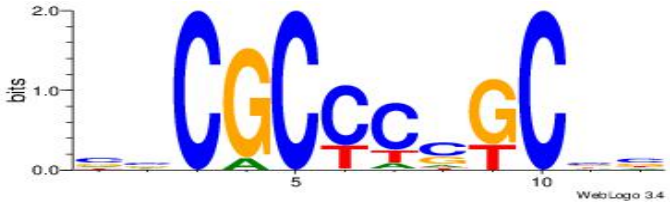
Alignment:

```
BBCGCCCSGCVV
----CCCCRCCC
```

Original motif Consensus sequence: VVGCSGGGCGBB



Reverse complement motif Consensus sequence: BBCGCCCSGCVV

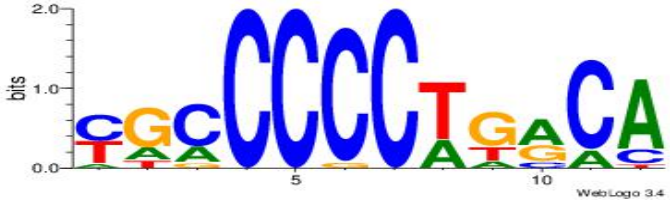


Dataset #:	3
Motif ID:	51
Motif name:	INSM1
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	8
Similarity score:	0.0794271

Alignment:
MGCCCCCTGMCA
---CCCCRCCC-

Original motif Consensus sequence: TGYCAGGGGGCR

Reverse complement motif Consensus sequence: MGCCCCCTGMCA



Dataset #:	1
Motif ID:	14
Motif name:	Motif 14
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	8
Similarity score:	0.0808211

Alignment:
GKGTGKGC
GGGKGGGG

Original motif Consensus sequence: GCRCACRC

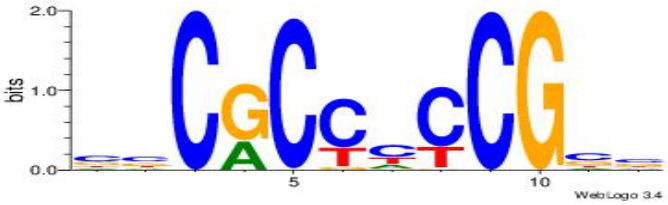
Reverse complement motif Consensus sequence: GKGTGKGC

Dataset #:	4
Motif ID:	88
Motif name:	ssCrCYyYCGss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	8
Similarity score:	0.0819499

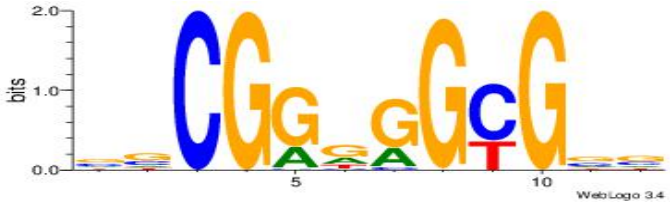
Alignment:

```
BBCGGKGGMGBB
---GGGKGGGG-
```

Original motif Consensus sequence: BBCRCCYCCGBB



Reverse complement motif Consensus sequence: BBCGGKGGMGBB



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

Original motif Consensus sequence: ASASAGAA

Reverse complement motif Consensus sequence: TTCTSTST

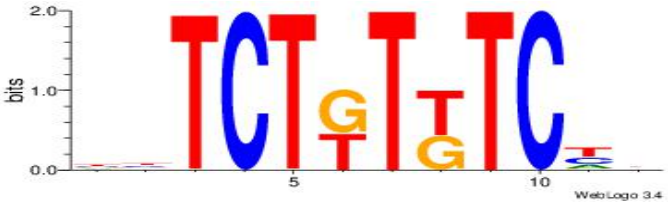
Best Matches for Motif ID 7 (Highest to Lowest)

Dataset #:	4
Motif ID:	92
Motif name:	tyTCTkTkTCyy
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.00355249

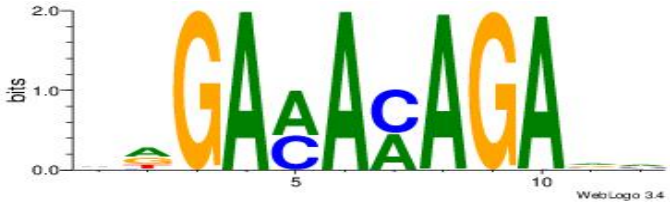
Alignment:

```
BBTCTKTKTCHB
-TTCTSTST---
```

Original motif Consensus sequence: BBTCTKTKTCHB



Reverse complement motif Consensus sequence: VHGARAYAGAVV



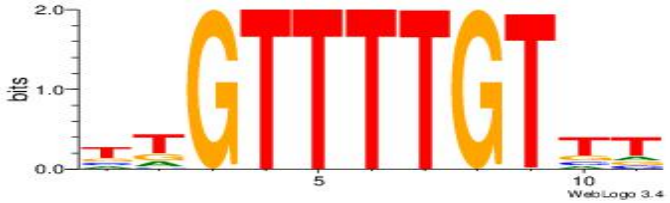
Dataset #:	4
Motif ID:	69
Motif name:	aaACAAAACaa
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0.0313478

Alignment:

```
TTGTTTTGTTT
---TTCTSTST
```

Original motif Consensus sequence: AAACAAAACAA

Reverse complement motif Consensus sequence: TTGTTTTGTTT



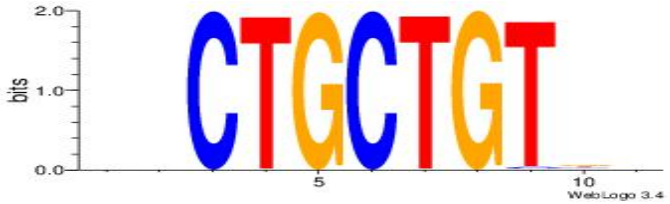
Dataset #:	4
Motif ID:	82
Motif name:	rmACAGCAGsr
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	8

Similarity score: 0.0319191

Alignment:
DVCTGCTGTVB
---TTCTSTST

Original motif Consensus sequence: VVACAGCAGVD

Reverse complement motif Consensus sequence: DVCTGCTGTVB

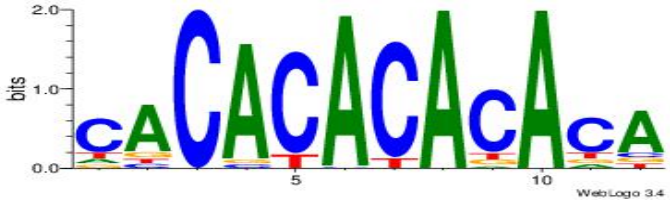


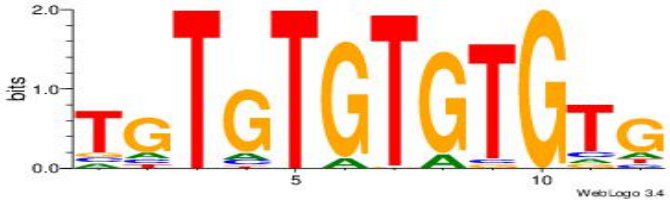
Dataset #: 4
Motif ID: 95
Motif name: CACACACACACA
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 2
Number of overlap: 8
Similarity score: 0.0398795

Alignment:
TGTGTGTGTGTG
-TTCTSTST---

Original motif Consensus sequence: CACACACACACA

Reverse complement motif Consensus sequence: TGTGTGTGTGTG



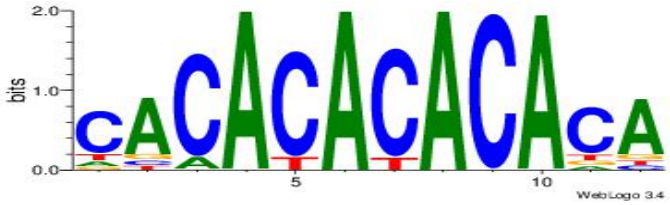


Dataset #:	4
Motif ID:	79
Motif name:	CACACACACACA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.0407034

Alignment:

```
TGTGTGTGTGTG
-TTCTSTST---
```

Original motif Consensus sequence: CACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTG

Dataset #:	4
Motif ID:	102

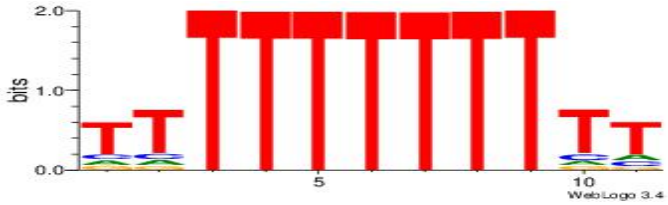
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	8
Similarity score:	0.0441956

Alignment:

```
AAAAAAAAAAA
ASASAGAA---
```

Original motif Consensus sequence: AAAAAAAAAAA

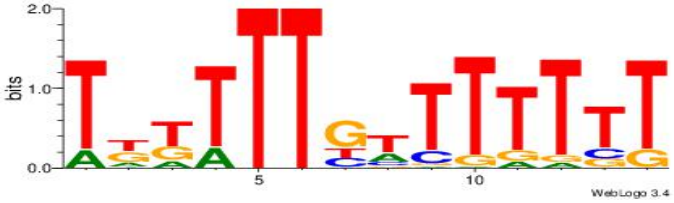
Reverse complement motif Consensus sequence: TTTTTTTTTTT



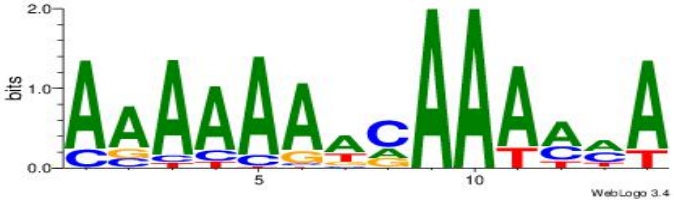
Dataset #:	2
Motif ID:	26
Motif name:	Motif 26
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	8
Similarity score:	0.0451851

Alignment:
TKKTTTGTTTTTTT
----TTCTSTST--

Original motif Consensus sequence: TKKTTTGTTTTTTT



Reverse complement motif Consensus sequence: AAAAAAACAAARR

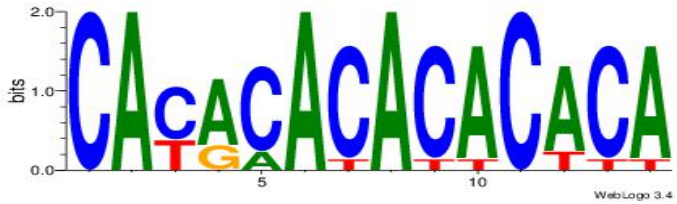


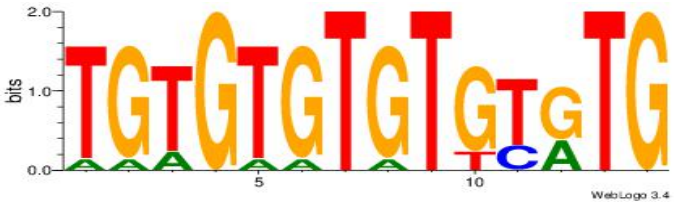
Dataset #:	2
Motif ID:	27
Motif name:	Motif 27
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	8
Similarity score:	0.0493389

Alignment:
TGTGTGTGTGTKTG
-----TTCTSTST-

Original motif Consensus sequence: CAYACACACACACA

Reverse complement motif Consensus sequence: TGTGTGTGTGTKT





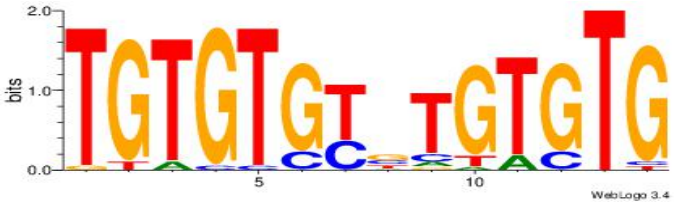
Dataset #:	2
Motif ID:	25
Motif name:	Motif 25
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	8
Similarity score:	0.0494079

Alignment:

```
CACACAVRCACACA
-----ASASAGAA-
```

Original motif Consensus sequence: CACACAVRCACACA

Reverse complement motif Consensus sequence: TGTGTGKVTGTGT



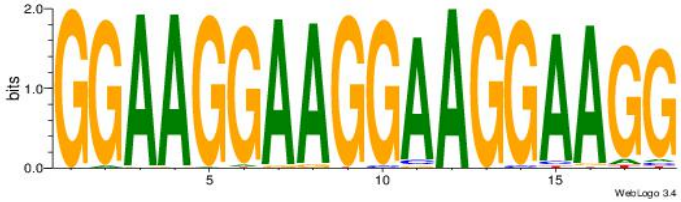
Dataset #:	3
Motif ID:	48

Motif name:	EWSR1-FLI1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8
Number of overlap:	8
Similarity score:	0.0559328

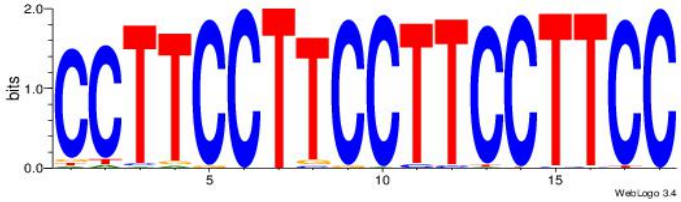
Alignment:

```
GGAAGGAAGGAAGGAAGG
-------ASASAGAA---
```

Original motif Consensus sequence: GGAAGGAAGGAAGGAAGG



Reverse complement motif Consensus sequence: CCTTCCTTCCTTCCTTCC



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

Original motif Consensus sequence: TTTWWAAW

Reverse complement motif Consensus sequence: WTTWWAAA

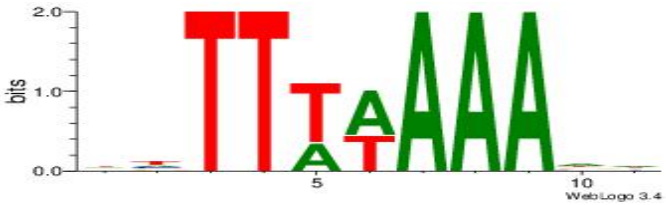
Best Matches for Motif ID 8 (Highest to Lowest)

Dataset #:	4
Motif ID:	104
Motif name:	wtTTWwAAAaw
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	8
Similarity score:	0

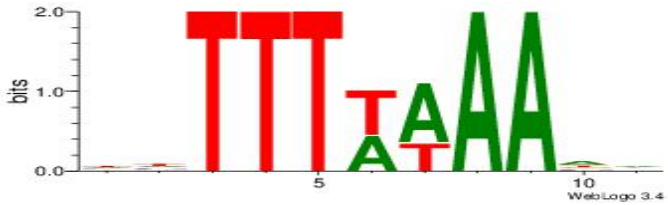
Alignment:

```
DDTTTWAAAHH
--TTTWWAAW-
```

Original motif Consensus sequence: HHTTTWAAADD



Reverse complement motif Consensus sequence: DDTTTWAAAHH



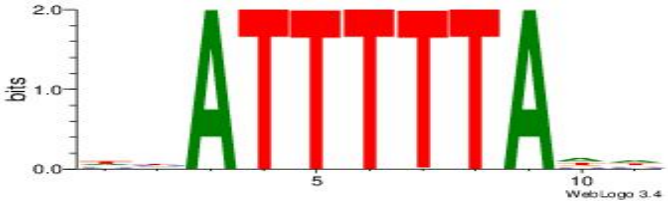
Dataset #:	4
Motif ID:	85
Motif name:	wtATTTTTAww
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif

Direction:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0.0386447

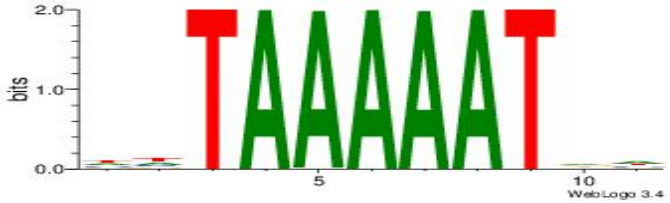
Alignment:

```
DHATTTTTADD
---TTTWWAAW
```

Original motif Consensus sequence: DHATTTTTADD



Reverse complement motif Consensus sequence: DDTAAAAATHD



Dataset #:	4
Motif ID:	81
Motif name:	wwTAAwAAww
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	8
Similarity score:	0.05878

Alignment:

```
HHTTWTTADD
--TTTWWAAW
```

Original motif Consensus sequence: DDTAAWAAHH

Reverse complement motif Consensus sequence: HHTTWTTADD

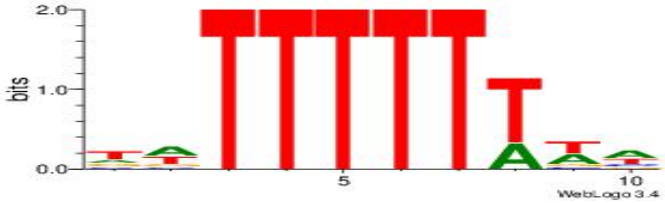
Dataset #:	4
Motif ID:	76
Motif name:	wwWAAAAAwa
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	8
Similarity score:	0.0595334

Alignment:

```
HWTTTTTTWW
--TTTWWAAW
```

Original motif Consensus sequence: WWAAAAAAWH

Reverse complement motif Consensus sequence: HWTTTTTTWW



Dataset #:	4
Motif ID:	83
Motif name:	wwTAAAwAww
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	8
Similarity score:	0.0618533

Alignment:

```
HHTWTTTADD
--TTTWWAAW
```

Original motif Consensus sequence: DDTAAAWAHH

Reverse complement motif Consensus sequence: HHTWTTTADD

Dataset #:	4
Motif ID:	71
Motif name:	wyATTTTAww
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	8

Similarity score: 0.0715612

Alignment:
DDTAAAATHD
TTTWWAAW--

Original motif Consensus sequence: DHATTTTADD

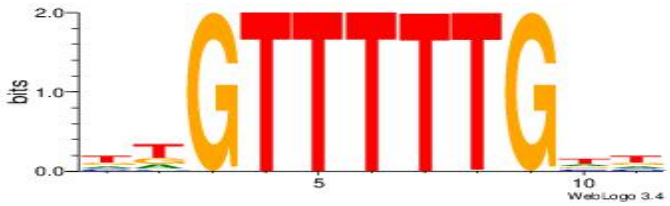
Reverse complement motif Consensus sequence: DDTAAAATHD

Dataset #: 4
Motif ID: 86
Motif name: aaCAAAAACaa
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 4
Number of overlap: 8
Similarity score: 0.0766993

Alignment:
HHCAAAAACAH
WTTWWAAA---

Original motif Consensus sequence: HHCAAAAACAH

Reverse complement motif Consensus sequence: HTGTTTTTGHH



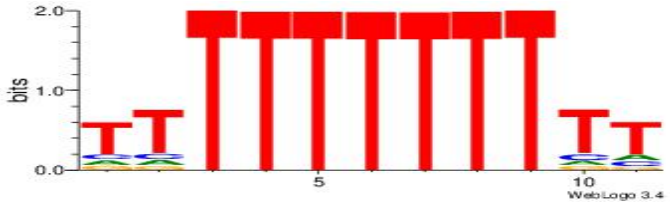
Dataset #:	4
Motif ID:	102
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0.0793607

Alignment:

```
TTTTTTTTTTT
---TTTWWAAW
```

Original motif Consensus sequence: AAAAAAAAAAA

Reverse complement motif Consensus sequence: TTTTTTTTTTT



Dataset #:	1
Motif ID:	1

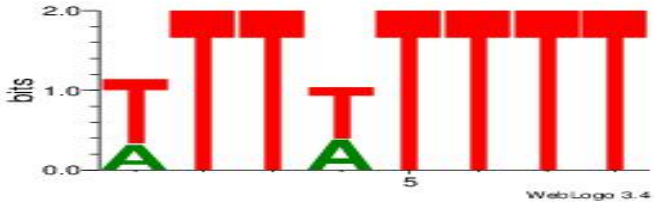
Motif name:	Motif 1
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	8
Similarity score:	0.0832518

Alignment:

```
TTTWTTTT
TTTWWAAW
```

Original motif Consensus sequence: AAAAWAAA

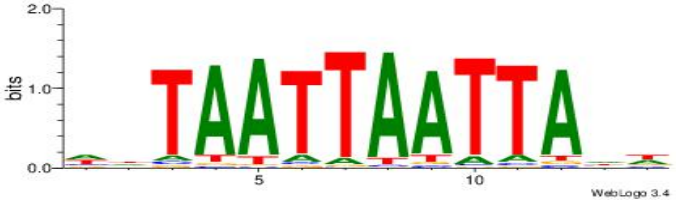
Reverse complement motif Consensus sequence: TTTWTTTT



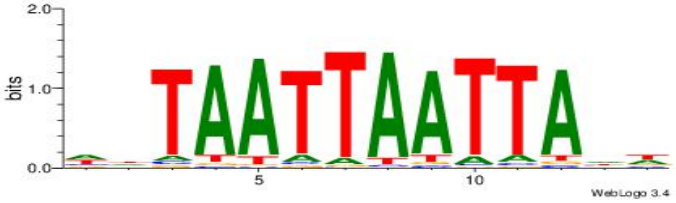
Dataset #:	4
Motif ID:	98
Motif name:	wwTAATTAATTAww
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	8
Similarity score:	0.0855882

Alignment:
HDTAATTAATTAHD
----WTTWWAAA--

Original motif Consensus sequence: HDTAATTAATTAHD



Reverse complement motif Consensus sequence: DHTAATTAATTADH



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

Original motif Consensus sequence: GCTGGGAW

Reverse complement motif Consensus sequence: WTCCCAGC

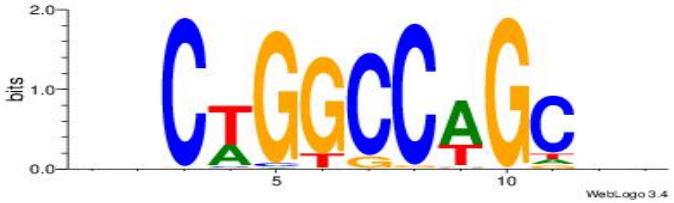
Best Matches for Motif ID 9 (Highest to Lowest)

Dataset #:	4
Motif ID:	80
Motif name:	ssCwGGCCwGCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3

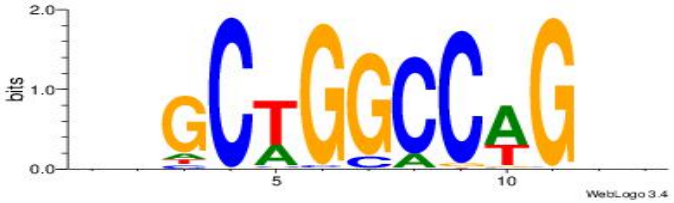
Number of overlap: 8
Similarity score: 0.0777349

Alignment:
BBGCTGGCCWGBB
--GCTGGGAW---

Original motif Consensus sequence: BBCWGGCCAGCBB



Reverse complement motif Consensus sequence: BBGCTGGCCWGBB



Dataset #: 1
Motif ID: 12
Motif name: Motif 12
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 1
Number of overlap: 8
Similarity score: 0.0778961

Alignment:
GCTGRCCT
GCTGGGAW

Original motif Consensus sequence: AGGMCAGC

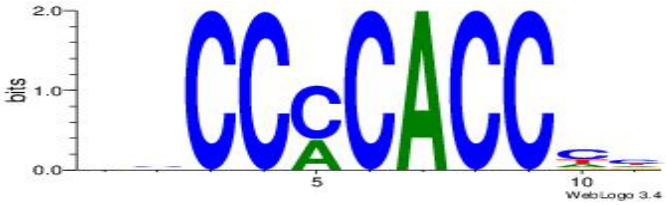
Reverse complement motif Consensus sequence: GCTGRCCT

Dataset #:	4
Motif ID:	89
Motif name:	ccCCmCACCcc
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:	0.0787949

Alignment:

```
HBCCMCACCHH
-WTCCCAGC--
```

Original motif Consensus sequence: HBCCMCACCHH



Reverse complement motif Consensus sequence: DDGGTGRGGBD

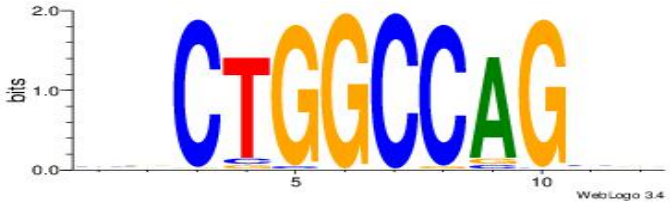
Dataset #:	4
Motif ID:	99

Motif name:	sgCTGGCCAGcs
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:	0.0902995

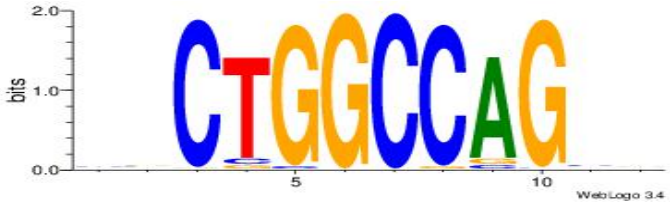
Alignment:

```
VVCTGGCCAGBB
-GCTGGGAW---
```

Original motif Consensus sequence: BBCTGGCCAGVV



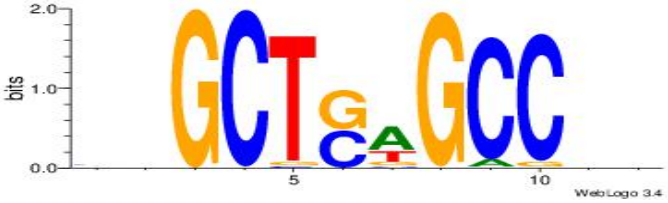
Reverse complement motif Consensus sequence: VVCTGGCCAGBB



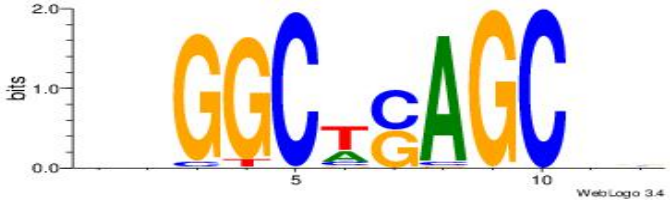
Dataset #:	4
Motif ID:	77
Motif name:	ssGCTswGCCms
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	8
Similarity score:	0.0923672

Alignment:
VBGCTSAGCCHB
--GCTGGGAW--

Original motif Consensus sequence: VBGCTSAGCCHB



Reverse complement motif Consensus sequence: BDGGCTSAGCBV

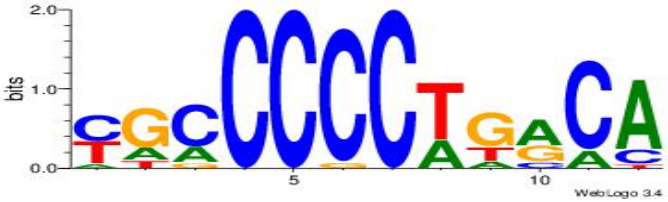


Dataset #:	3
Motif ID:	51
Motif name:	INSM1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	8
Similarity score:	0.0966101

Alignment:
MGCCCCCTGMCA
--WTCCCAGC--

Original motif Consensus sequence: TGYCAGGGGGCR

Reverse complement motif Consensus sequence: MGCCCCCTGMCA



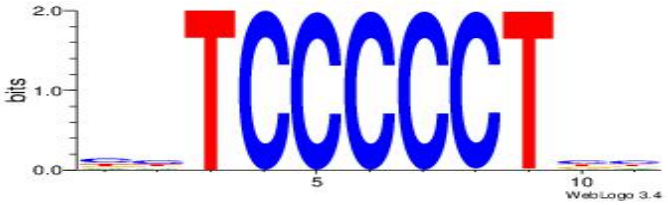
Dataset #:	4
Motif ID:	93
Motif name:	rrAGGGGGArr
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	8
Similarity score:	0.0986017

Alignment:

```
VVTCCCCCTVV
-WTCCCAGC--
```

Original motif Consensus sequence: VVAGGGGGAVV

Reverse complement motif Consensus sequence: VVTCCCCCTVV



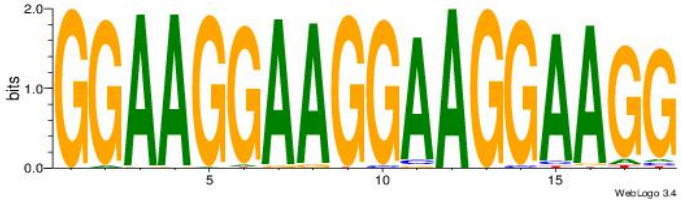
Dataset #:	3
Motif ID:	48

Motif name:	EWSR1-FLI1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	11
Number of overlap:	8
Similarity score:	0.0991014

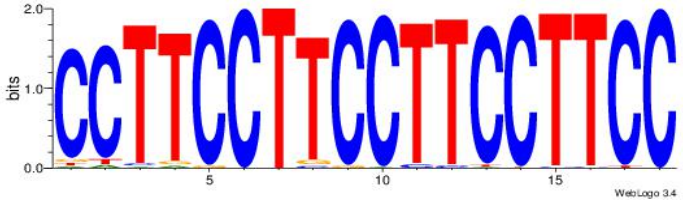
Alignment:

```
GGAAGGAAGGAAGGAAGG
GCTGGGAW----------
```

Original motif Consensus sequence: GGAAGGAAGGAAGGAAGG



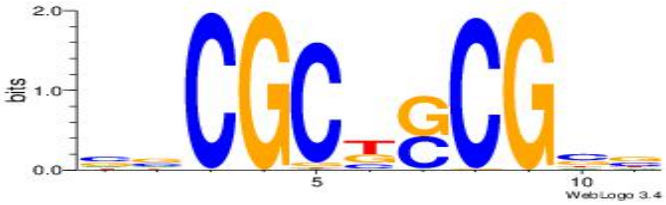
Reverse complement motif Consensus sequence: CCTTCCTTCCTTCCTTCC



Dataset #:	4
Motif ID:	94
Motif name:	ssCGCksCGss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.0999463

Alignment:
BBCGSRGCGVV
WTCCCAGC---

Original motif Consensus sequence: VVCGCKSCGBB



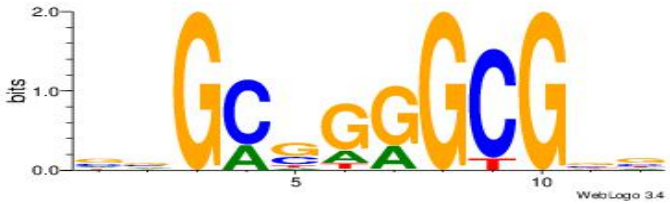
Reverse complement motif Consensus sequence: BBCGSRGCGVV

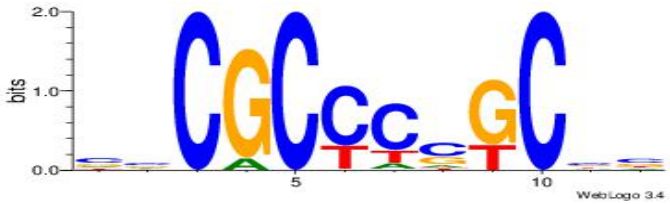
Dataset #:	4
Motif ID:	67
Motif name:	ssGMsGRGCGss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	8
Similarity score:	0.10192

Alignment:
BBCGCCCSGCVV
--WTCCCAGC--

Original motif Consensus sequence: VVGCSGGGCGBB

Reverse complement motif Consensus sequence: BBCGCCCSGCVV





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

Original motif Consensus sequence: TAMATA

Reverse complement motif Consensus sequence: TATRTA

Best Matches for Motif ID 10 (Highest to Lowest)

Dataset #:	4
Motif ID:	74
Motif name:	twTACATAvw
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	6
Similarity score:	0.0118037

Alignment:

```
HHTACATAVD
--TAMATA--
```

Original motif Consensus sequence: HHTACATAVD

Reverse complement motif Consensus sequence: DBTATGTAHH

Dataset #:	4
Motif ID:	83
Motif name:	wwTAAAwAww
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	6
Similarity score:	0.0306891

Alignment:

```
DDTAAAWAHH
--TAMATA--
```

Original motif Consensus sequence: DDTAAAWAHH

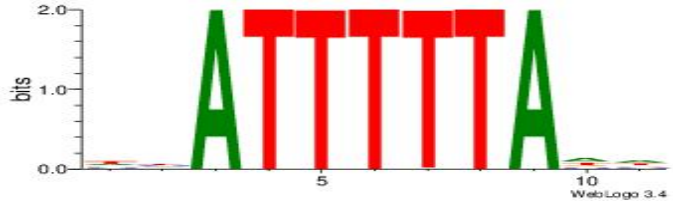
Reverse complement motif Consensus sequence: HHTWTTTADD

Dataset #:	4
Motif ID:	85
Motif name:	wtATTTTTAww
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	6
Similarity score:	0.0556351

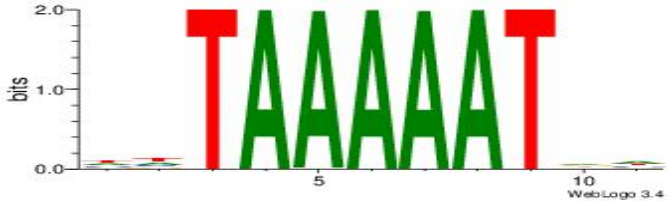
Alignment:

```
DDTAAAAATHD
--TAMATA---
```

Original motif Consensus sequence: DHATTTTTADD



Reverse complement motif Consensus sequence: DDTAAAAATHD



Dataset #:	4
Motif ID:	100
Motif name:	wrTGTATACAyw
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	6

Similarity score: 0.063312

Alignment:
HDTGTATACAHD
--TATRTA----

Original motif Consensus sequence: HDTGTATACAHD

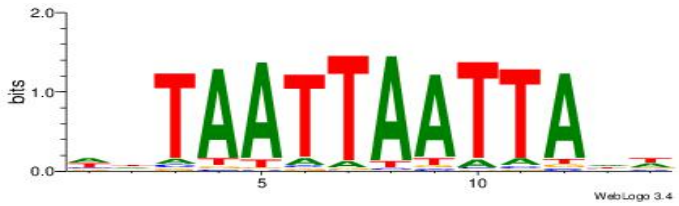
Reverse complement motif Consensus sequence: DHTGTATACADH

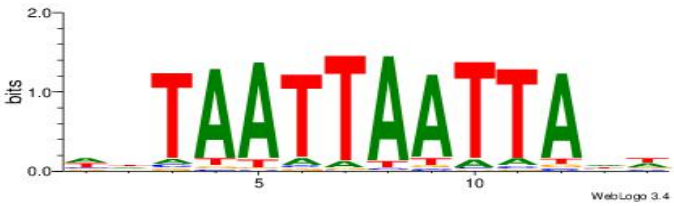
Dataset #: 4
Motif ID: 98
Motif name: wwTAATTAATTAww
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 3
Number of overlap: 6
Similarity score: 0.0665502

Alignment:
DHTAATTAATTADH
------TAMATA--

Original motif Consensus sequence: HDTAATTAATTAHD

Reverse complement motif Consensus sequence: DHTAATTAATTADH





Dataset #:	1
Motif ID:	2
Motif name:	Motif 2
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	6
Similarity score:	0.0713843

Alignment:

```
TGTGTGTG
--TATRTA
```

Original motif Consensus sequence: CACACACA

Reverse complement motif Consensus sequence: TGTGTGTG

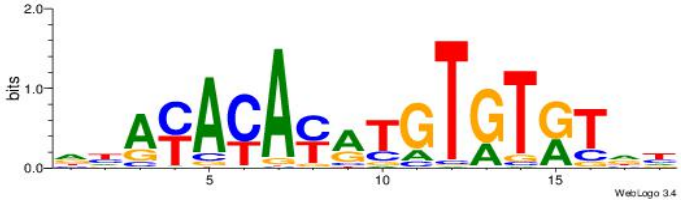
Dataset #:	4
Motif ID:	97

Motif name:	ryayAyAyrtGTRTrTry
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	6
Similarity score:	0.0717552

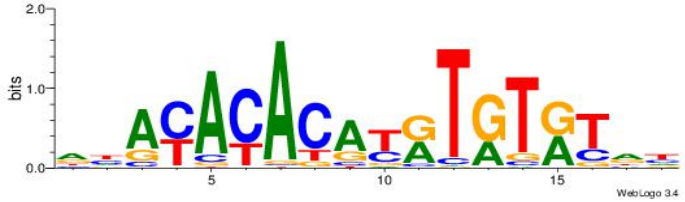
Alignment:

```
DHAYAYAYRTGTGTRTDH
-----------TATRTA-
```

Original motif Consensus sequence: DHAYAYAYRTGTGTRTDH



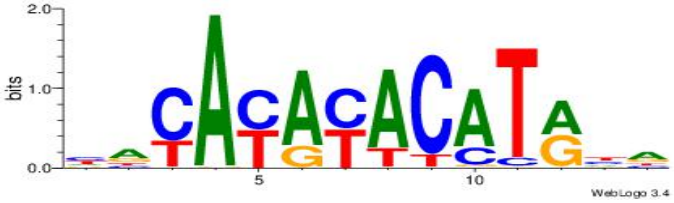
Reverse complement motif Consensus sequence: HDAMACACAKKTKTKTHD



Dataset #:	4
Motif ID:	75
Motif name:	yayAyAyACATrya
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	6
Similarity score:	0.0734948

Alignment:
HACAYAYACATRHD
------TAMATA--

Original motif Consensus sequence: HACAYAYACATRHD



Reverse complement motif Consensus sequence: DHKATGTKTKTGT

Dataset #:	1
Motif ID:	8
Motif name:	Motif 8
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:	0.073632

Alignment:
TTTWWAAW
--TATRTA

Original motif Consensus sequence: TTTWWAAW

Reverse complement motif Consensus sequence: WTTWWAAA

Dataset #:	1
Motif ID:	3
Motif name:	Motif 3
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	6
Similarity score:	0.0746703

Alignment:

```
TYTATWT
-TAMATA
```

Original motif Consensus sequence: AWATAMA

Reverse complement motif Consensus sequence: TYTATWT

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

Original motif Consensus sequence: CCGCCGCC

Reverse complement motif Consensus sequence: GGCGGCGG

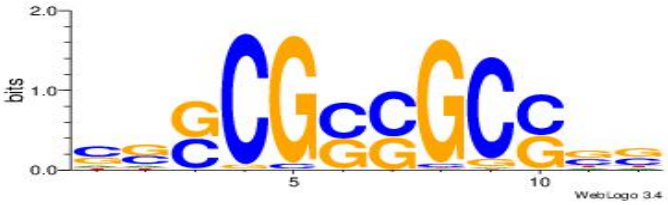
Best Matches for Motif ID 11 (Highest to Lowest)

Dataset #:	4
Motif ID:	78
Motif name:	sssCGssGCsss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	8
Similarity score:	0.0257637

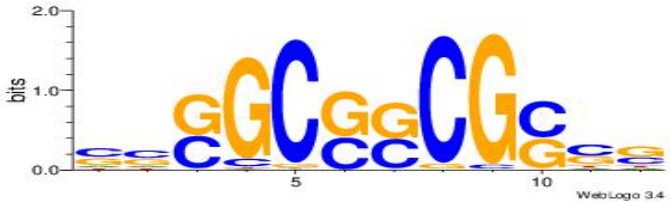
Alignment:

```
SSSCGSSGCSSS
--CCGCCGCC--
```

Original motif Consensus sequence: SSSCGSSGCSSS



Reverse complement motif Consensus sequence: SSSGCSSCGSSS

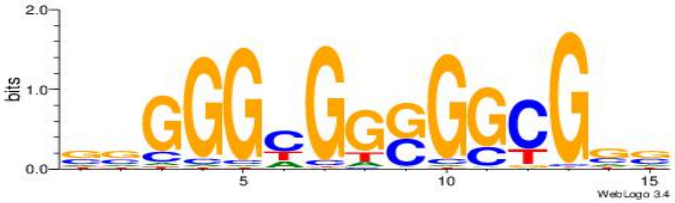


Dataset #:	4
Motif ID:	91
Motif name:	ssCGCCsCCrCCCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0.0356841

Alignment:
SSGGGCGGSGGCGSS
---GGCGGCGG----

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS



Dataset #:	1
Motif ID:	6
Motif name:	Motif 6
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1

Number of overlap: 8
Similarity score: 0.0379682

Alignment:
GGGKGGGG
GGCGGCGG

Original motif Consensus sequence: CCCCRCCC

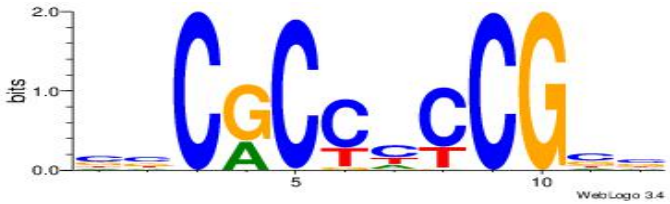
Reverse complement motif Consensus sequence: GGGKGGGG

Dataset #: 4
Motif ID: 88
Motif name: ssCrCYyYCGss
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 4
Number of overlap: 8
Similarity score: 0.0392404

Alignment:
BBCGGKGGMGBB
---GGCGGCGG-

Original motif Consensus sequence: BBCRCCYCCGBB

Reverse complement motif Consensus sequence: BBCGGKGGMGBB

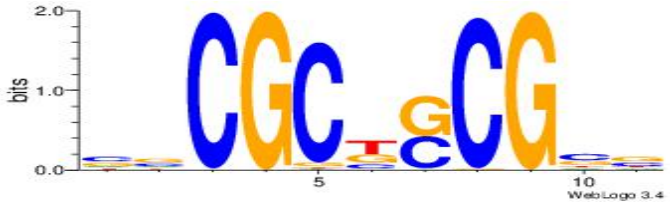


Dataset #:	4
Motif ID:	94
Motif name:	ssCGCksCGss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	8
Similarity score:	0.0444299

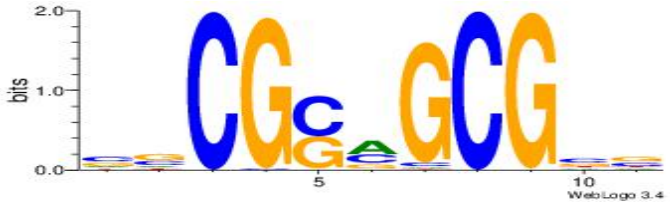
Alignment:

```
VVCGCKSCGBB
--GGCGGCGG-
```

Original motif Consensus sequence: VVCGCKSCGBB



Reverse complement motif Consensus sequence: BBCGSRGCGVV



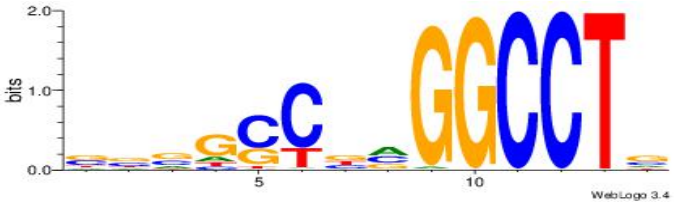
Dataset #:	3
Motif ID:	28

Motif name:	Zfx
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	8
Similarity score:	0.049392

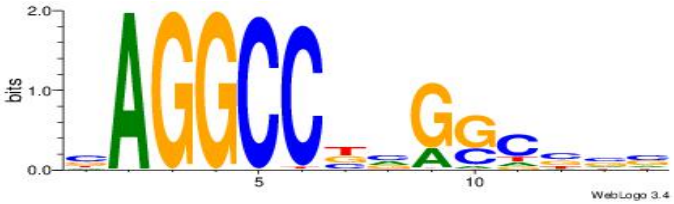
Alignment:

```
BBVGCCBVGGCCTV
----CCGCCGCC--
```

Original motif Consensus sequence: BBVGCCBVGGCCTV



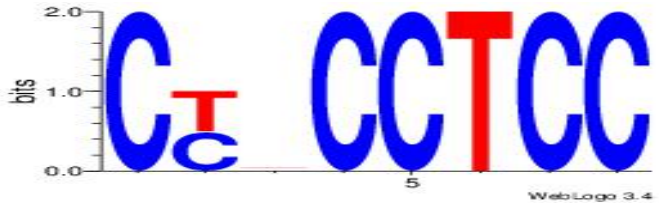
Reverse complement motif Consensus sequence: VAGGCCBBGGCVB



Dataset #:	1
Motif ID:	4
Motif name:	Motif 4
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	8
Similarity score:	0.0505097

Alignment:
CYBCCTCC
CCGCCGCC

Original motif Consensus sequence: CYBCCTCC



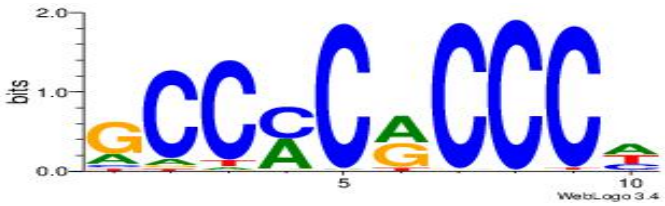
Reverse complement motif Consensus sequence: GGAGGVMG

Dataset #:	3
Motif ID:	52
Motif name:	Klf4
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:	0.0512458

Alignment:
GCCYCMCCCD
-CCGCCGCC-

Original motif Consensus sequence: DGGGYGKGGC

Reverse complement motif Consensus sequence: GCCYCMCCCD

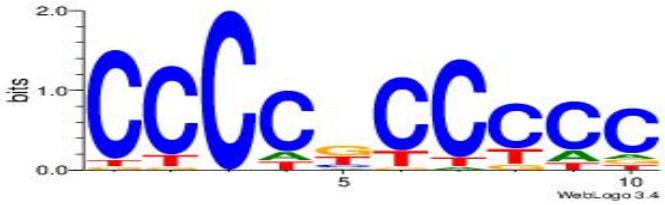


Dataset #:	3
Motif ID:	32
Motif name:	SP1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	8
Similarity score:	0.0543239

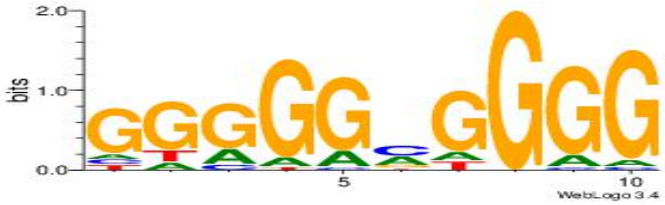
Alignment:

```
GGGGGYGGGG
GGCGGCGG--
```

Original motif Consensus sequence: CCCCKCCCCC



Reverse complement motif Consensus sequence: GGGGGYGGGG



Dataset #:	3
Motif ID:	51

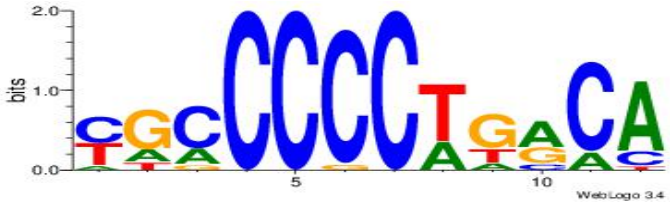
Motif name:	INSM1
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	8
Similarity score:	0.0580255

Alignment:

```
MGCCCCCTGMCA
---CCGCCGCC-
```

Original motif Consensus sequence: TGYCAGGGGGCR

Reverse complement motif Consensus sequence: MGCCCCCTGMCA



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

Original motif Consensus sequence: AGGMCAGC

Reverse complement motif Consensus sequence: GCTGRCCT

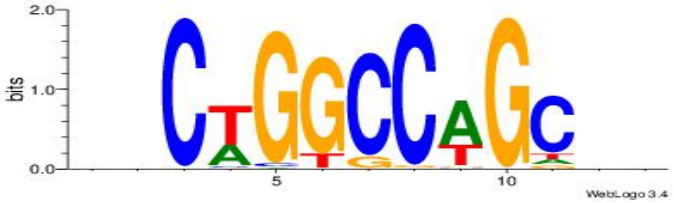
Best Matches for Motif ID 12 (Highest to Lowest)

Dataset #:	4
Motif ID:	80
Motif name:	ssCwGGCCwGCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0.0329398

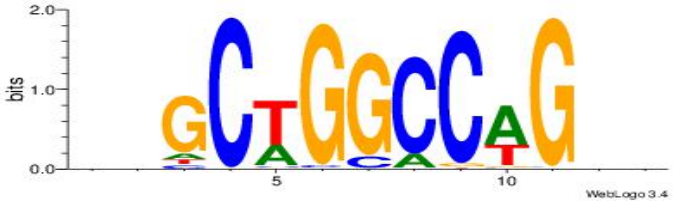
Alignment:

```
BBCWGGCCAGCBB
---AGGMCAGC--
```

Original motif Consensus sequence: BBCWGGCCAGCBB



Reverse complement motif Consensus sequence: BBGCTGGCCWGBI

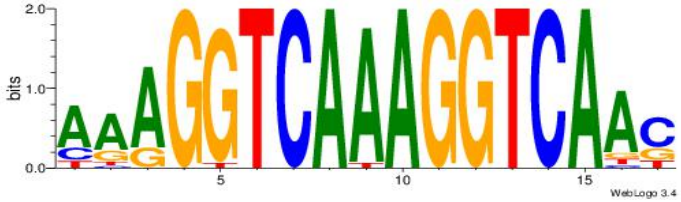


Dataset #:	3
Motif ID:	59
Motif name:	NR1H2RXRA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	10
Number of overlap:	8

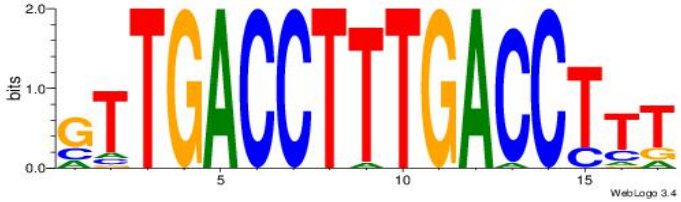
Similarity score: 0.0348586

Alignment:
GTTGACCTTTGACCTTT
GCTGRCCT---------

Original motif Consensus sequence: AAAGGTCAAAGGTCAAC



Reverse complement motif Consensus sequence: GTTGACCTTTGACCTTT

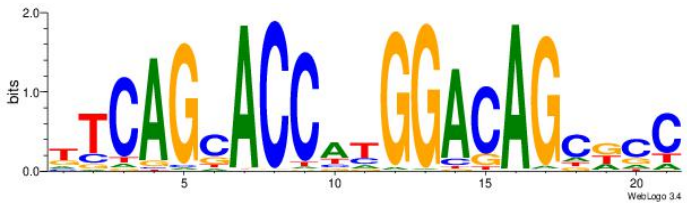


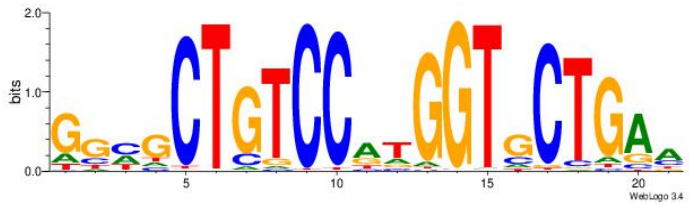
Dataset #:	3
Motif ID:	35
Motif name:	REST
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.0382252

Alignment:
TTCAGCACCATGGACAGCKCC
----------AGGMCAGC---

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC

Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA



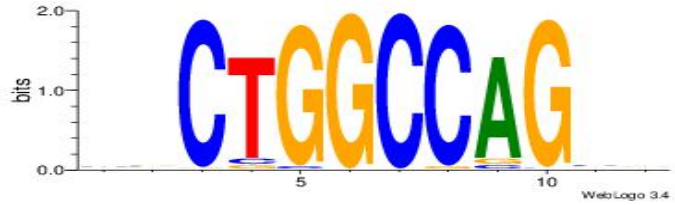


Dataset #:	4
Motif ID:	99
Motif name:	sgCTGGCCAGcs
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.0441629

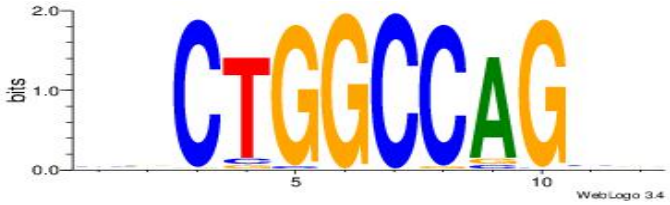
Alignment:

```
BBCTGGCCAGVV
-GCTGRCCT---
```

Original motif Consensus sequence: BBCTGGCCAGVV



Reverse complement motif Consensus sequence: VVCTGGCCAGBB



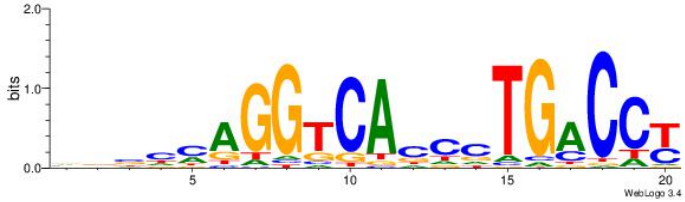
Dataset #:	3
Motif ID:	45

Motif name:	ESR1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	8
Similarity score:	0.0543245

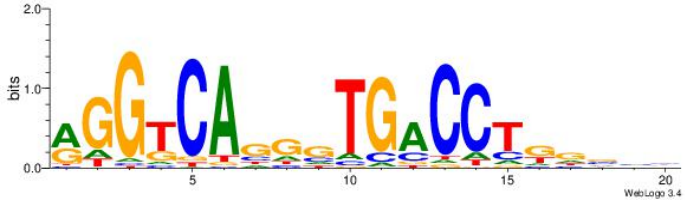
Alignment:

```
MGGTCAGGGTGACCTRDBHV
-------GCTGRCCT-----
```

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY



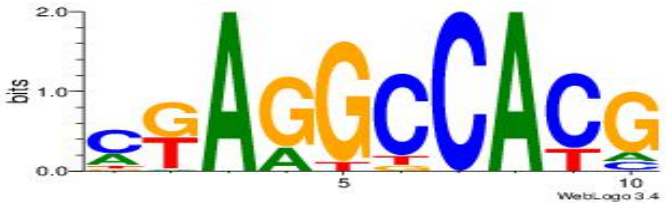
Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV



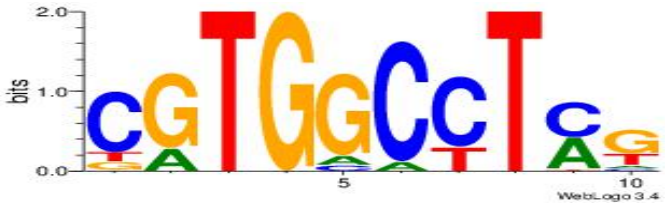
Dataset #:	4
Motif ID:	70
Motif name:	mkARGCCACG
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	8
Similarity score:	0.0574643

Alignment:
CGTGGCCTYG
GCTGRCCT--

Original motif Consensus sequence: CKAGGCCACG



Reverse complement motif Consensus sequence: CGTGGCCTYG

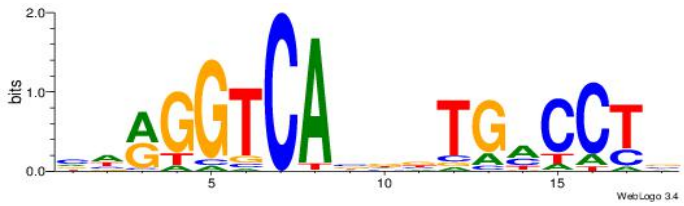


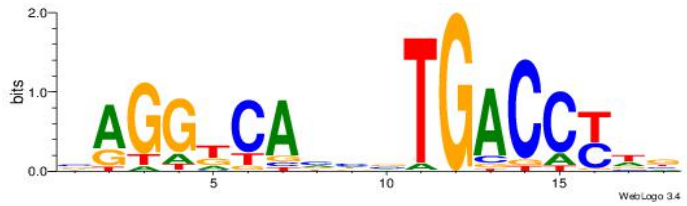
Dataset #:	3
Motif ID:	46
Motif name:	ESR2
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	9
Number of overlap:	8
Similarity score:	0.0637872

Alignment:
BAGGYCABHBTGACCKHV
--------GCTGRCCT--

Original motif Consensus sequence: VHRGGTCABDBTGMCCTB

Reverse complement motif Consensus sequence: BAGGYCABHBTGACCKHV





Dataset #:	1
Motif ID:	9
Motif name:	Motif 9
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	8
Similarity score:	0.0653089

Alignment:

```
WTCCCAGC
AGGMCAGC
```

Original motif Consensus sequence: GCTGGGAW

Reverse complement motif Consensus sequence: WTCCCAGC

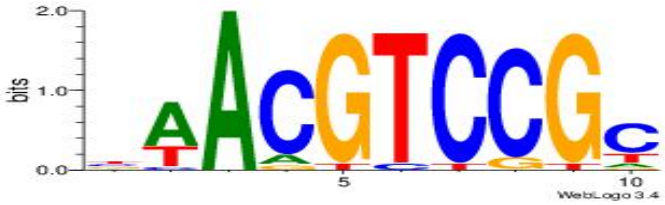
Dataset #:	3
Motif ID:	53

Motif name:	MIZF
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	8
Similarity score:	0.0689211

Alignment:

```
GCGGACGTTV
GCTGRCCT--
```

Original motif Consensus sequence: BAACGTCCGC

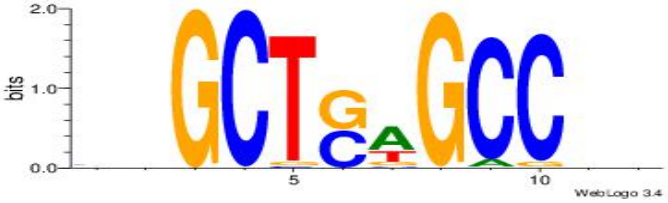


Reverse complement motif Consensus sequence: GCGGACGTTV

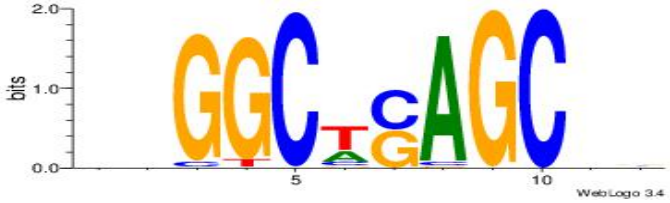
Dataset #:	4
Motif ID:	77
Motif name:	ssGCTswGCCms
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	8
Similarity score:	0.0700771

Alignment:
VBGCTSAGCCHB
--GCTGRCCT--

Original motif Consensus sequence: VBGCTSAGCCHB



Reverse complement motif Consensus sequence: BDGGCTSAGCBV



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

Original motif Consensus sequence: GAGRCAGR

Reverse complement motif Consensus sequence: MCTGKCTC

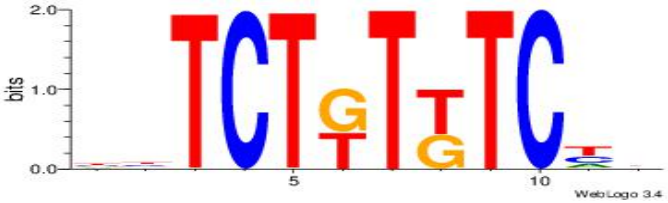
Best Matches for Motif ID 13 (Highest to Lowest)

Dataset #:	4
Motif ID:	92
Motif name:	tyTCTkTkTCyy
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3

Number of overlap: 8
Similarity score: 0.0131318

Alignment:
VHGARAYAGAVV
--GAGRCAGR--

Original motif Consensus sequence: BBTCTKTKTCHB



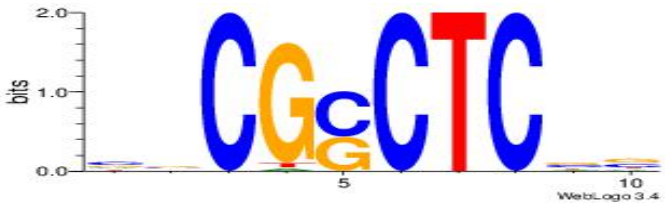
Reverse complement motif Consensus sequence: VHGARAYAGAVV

Dataset #: 4
Motif ID: 73
Motif name: ssCGsCTCss
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 8
Similarity score: 0.0334555

Alignment:
BBGAGSCGVV
--GAGRCAGR

Original motif Consensus sequence: VVCGSCTCBB

Reverse complement motif Consensus sequence: BBGAGSCGVV

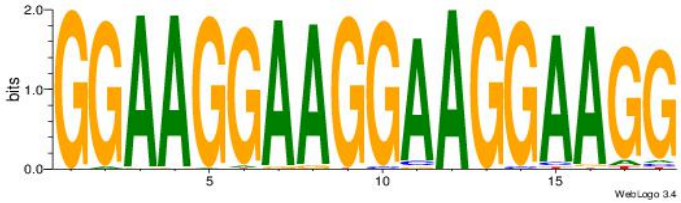


Dataset #:	3
Motif ID:	48
Motif name:	EWSR1-FLI1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	8
Similarity score:	0.0397014

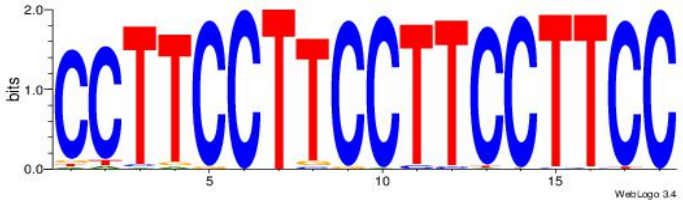
Alignment:

```
GGAAGGAAGGAAGGAAGG
------GAGRCAGR----
```

Original motif Consensus sequence: GGAAGGAAGGAAGGAAGG



Reverse complement motif Consensus sequence: CCTTCCTTCCTTCCTTCC



Dataset #:	4

Motif ID:	99
Motif name:	sgCTGGCCAGcs
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.0475948

Alignment:

```
VVCTGGCCAGBB
-MCTGKCTC---
```

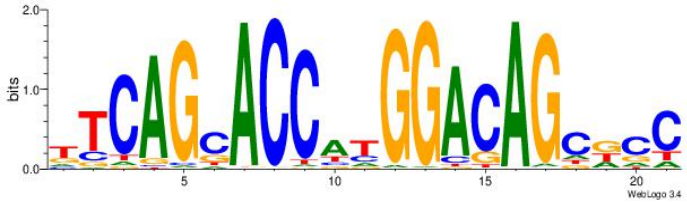
Original motif Consensus sequence: BBCTGGCCAGVV

Reverse complement motif Consensus sequence: VVCTGGCCAGBB

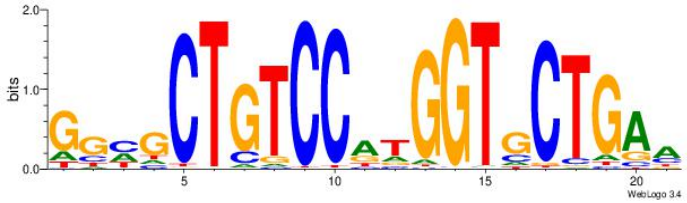
Dataset #:	3
Motif ID:	35
Motif name:	REST
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0.049302

Alignment:
GGYGCTGTCCATGGTGCTGAA
---MCTGKCTC----------

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC



Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA



Dataset #:	2
Motif ID:	23
Motif name:	Motif 23
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	8
Similarity score:	0.0551203

Alignment:
GGGGMGGG
GAGRCAGR

Original motif Consensus sequence: CCCRCCCC

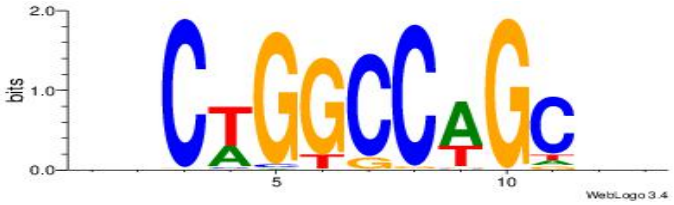
Reverse complement motif Consensus sequence: GGGGMGGG

Dataset #:	4
Motif ID:	80
Motif name:	ssCwGGCCwGCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	8
Similarity score:	0.055328

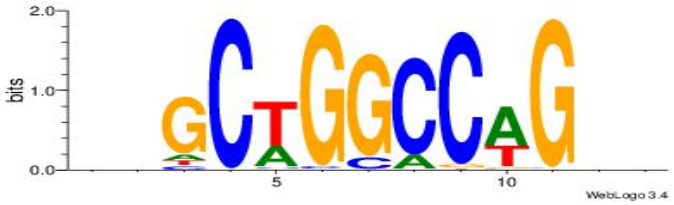
Alignment:

```
BBCWGGCCAGCBB
-MCTGKCTC----
```

Original motif Consensus sequence: BBCWGGCCAGCBB



Reverse complement motif Consensus sequence: BBGCTGGCCWGBI



Dataset #:	4
Motif ID:	93

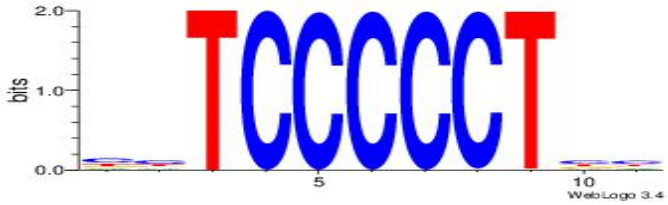
Motif name:	rrAGGGGGArr
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	8
Similarity score:	0.0555608

Alignment:

```
VVAGGGGGAVV
---GAGRCAGR
```

Original motif Consensus sequence: VVAGGGGGAVV

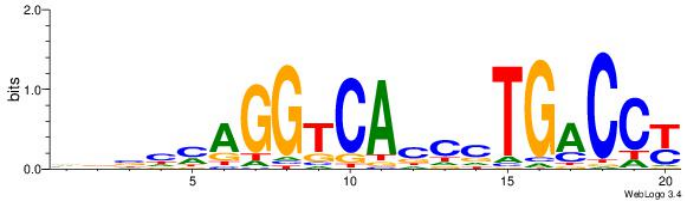
Reverse complement motif Consensus sequence: VVTCCCCCTVV



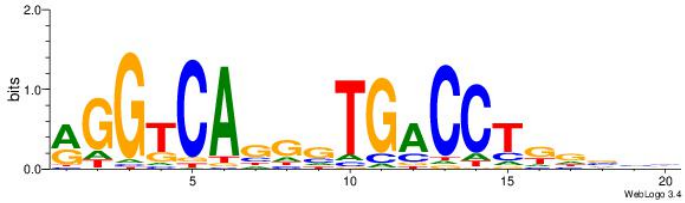
Dataset #:	3
Motif ID:	45
Motif name:	ESR1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	8
Similarity score:	0.055859

Alignment:
VDBHMAGGTCACCCTGACCY
----------MCTGKCTC

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY



Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV



Dataset #:	1
Motif ID:	12
Motif name:	Motif 12
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	8
Similarity score:	0.0588565

Alignment:
GCTGRCCT
MCTGKCTC

Original motif Consensus sequence: AGGMCAGC

Reverse complement motif Consensus sequence: GCTGRCCT

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

Original motif Consensus sequence: GCRCACRC

Reverse complement motif Consensus sequence: GKGTGKGC

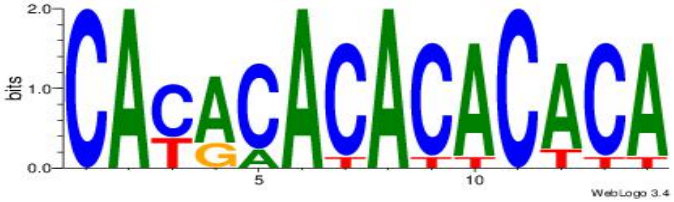
Best Matches for Motif ID 14 (Highest to Lowest)

Dataset #:	2
Motif ID:	27
Motif name:	Motif 27
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0.0307099

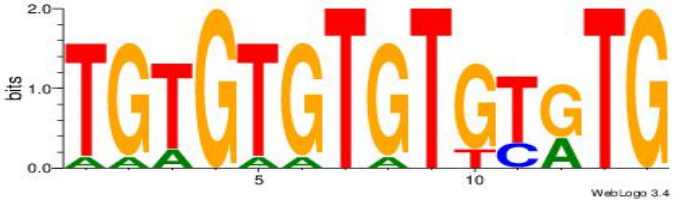
Alignment:

```
CAYACACACACACA
---GCRCACRC---
```

Original motif Consensus sequence: CAYACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTKT

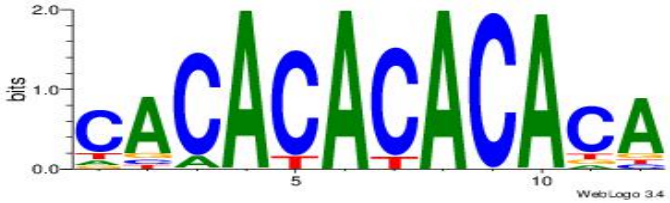


Dataset #:	4
Motif ID:	79
Motif name:	CACACACACACA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.0357914

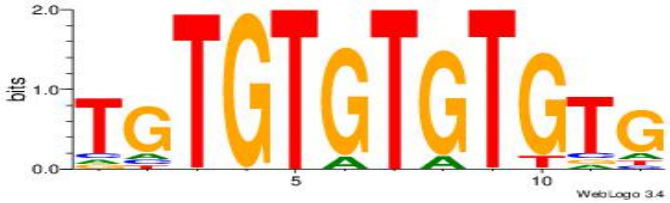
Alignment:

```
CACACACACACA
-GCRCACRC---
```

Original motif Consensus sequence: CACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTG

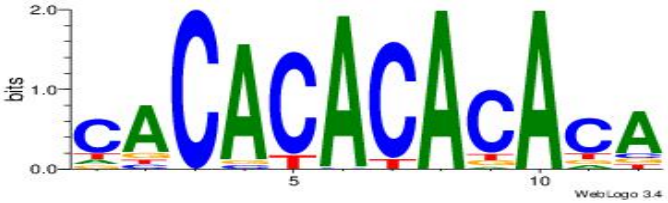


Dataset #:	4
Motif ID:	95
Motif name:	CACACACACACA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	8
Similarity score:	0.0366948

Alignment:

```
CACACACACACA
-GCRCACRC---
```

Original motif Consensus sequence: CACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTG

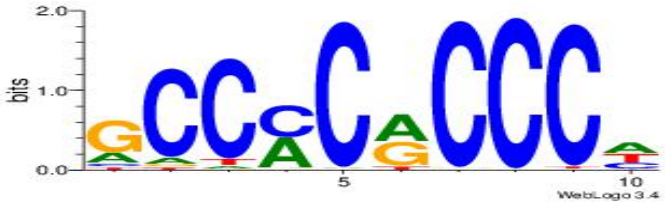
Dataset #:	3
Motif ID:	52
Motif name:	Klf4
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	8

Similarity score: 0.03983

Alignment:
DGGGYGKGGC
-GKGTGKGC-

Original motif Consensus sequence: DGGGYGKGGC

Reverse complement motif Consensus sequence: GCCYCMCCCD

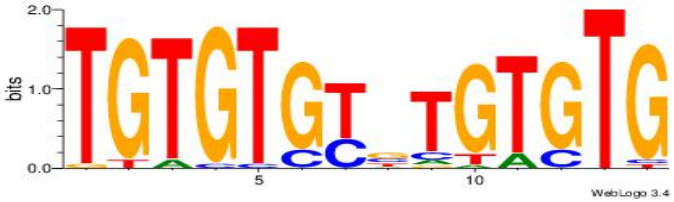


Dataset #: 2
Motif ID: 25
Motif name: Motif 25
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 6
Number of overlap: 8
Similarity score: 0.0418776

Alignment:
CACACAVRCACACA
-----GCRCACRC-

Original motif Consensus sequence: CACACAVRCACACA

Reverse complement motif Consensus sequence: TGTGTGKVTGTGT



Dataset #:	3
Motif ID:	44
Motif name:	Egr1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	8
Similarity score:	0.0429433

Alignment:

```
HGCGTGGGCGK
-GKGTGKGC--
```

Original motif Consensus sequence: HGCGTGGGCGK

Reverse complement motif Consensus sequence: YCGCCCACGCH

Dataset #:	1
Motif ID:	6

Motif name:	Motif 6
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	8
Similarity score:	0.0496623

Alignment:

```
GGGKGGGG
GKGTGKGC
```

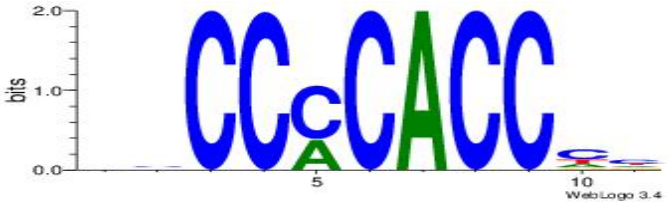
Original motif Consensus sequence: CCCCRCCC

Reverse complement motif Consensus sequence: GGGKGGGG

Dataset #:	4
Motif ID:	89
Motif name:	ccCCmCACCcc
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	8
Similarity score:	0.0505252

Alignment:
DDGGTGRGGBD
-GKGTGKGC--

Original motif Consensus sequence: HBCCMCACCHH



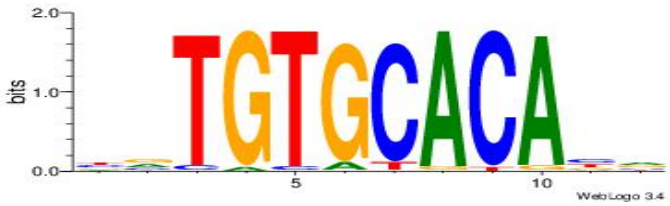
Reverse complement motif Consensus sequence: DDGGTGRGGBD

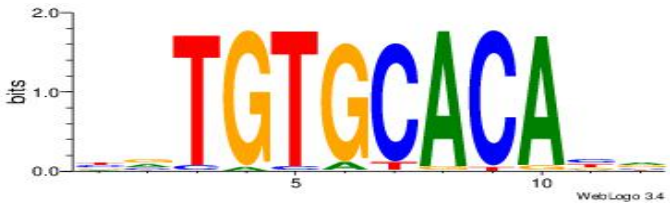
Dataset #:	4
Motif ID:	96
Motif name:	yrTGTGCACAyr
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0.0537384

Alignment:
BVTGTGCACABV
---GCRCACRC-

Original motif Consensus sequence: BVTGTGCACABV

Reverse complement motif Consensus sequence: BBTGTGCACAVV



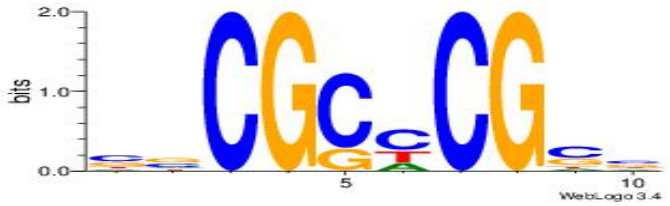


Dataset #: 4
Motif ID: 65
Motif name: ssCGrGCGss
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 2
Number of overlap: 8
Similarity score: 0.067702

Alignment:
VBCGCMCGSV
-GCRCACRC-

Original motif Consensus sequence: VSCGRGCGBV

Reverse complement motif Consensus sequence: VBCGCMCGSV



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

Original motif Consensus sequence: GRAAATG

Reverse complement motif Consensus sequence: CATTTKC

Best Matches for Motif ID 15 (Highest to Lowest)

Dataset #:	4
Motif ID:	71
Motif name:	wyATTTTAww
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	7
Similarity score:	0.0397876

Alignment:

```
DHATTTTADD
-CATTTKC--
```

Original motif Consensus sequence: DHATTTTADD

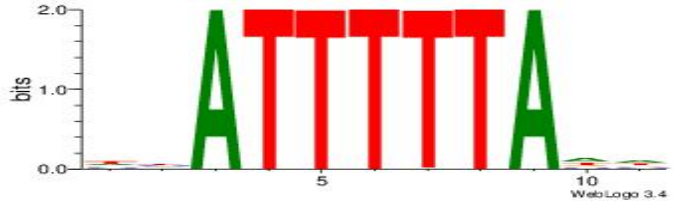
Reverse complement motif Consensus sequence: DDTAAAATHD

Dataset #:	4
Motif ID:	85
Motif name:	wtATTTTTAww
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	7
Similarity score:	0.0408373

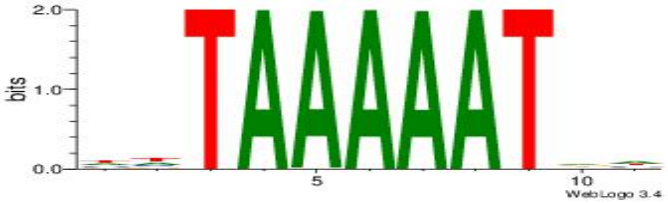
Alignment:

```
DDTAAAAATHD
---GRAAATG-
```

Original motif Consensus sequence: DHATTTTTADD



Reverse complement motif Consensus sequence: DDTAAAAATHD

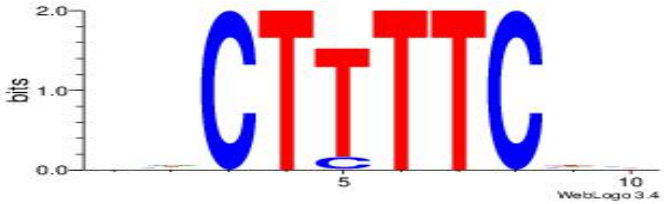


Dataset #:	4
Motif ID:	68
Motif name:	dwCTTTTCwy
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	7

Similarity score: 0.0424119

Alignment:
DHCTTTTCHH
-CATTTKC--

Original motif Consensus sequence: DHCTTTTCHH



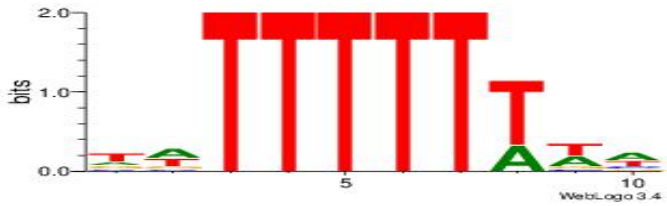
Reverse complement motif Consensus sequence: DHGAAAAGHD

Dataset #: 4
Motif ID: 76
Motif name: wwWAAAAAwa
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 1
Number of overlap: 7
Similarity score: 0.0627776

Alignment:
WWAAAAAAWH
---GRAAATG

Original motif Consensus sequence: WWAAAAAAWH

Reverse complement motif Consensus sequence: HWTTTTTTWW

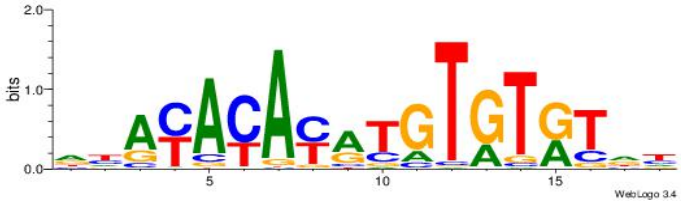


Dataset #:	4
Motif ID:	97
Motif name:	ryayAyAyrtGTRTrTry
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	8
Number of overlap:	7
Similarity score:	0.0639234

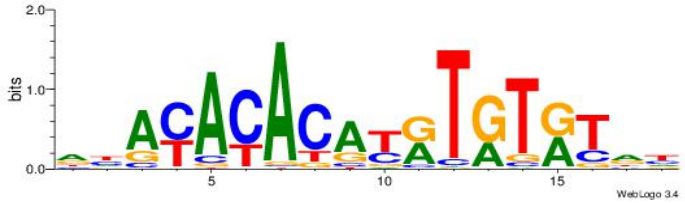
Alignment:

```
HDAMACACAKKTKTKTHD
-------CATTTKC----
```

Original motif Consensus sequence: DHAYAYAYRTGTGTRTDH



Reverse complement motif Consensus sequence: HDAMACACAKKTKTKTHD



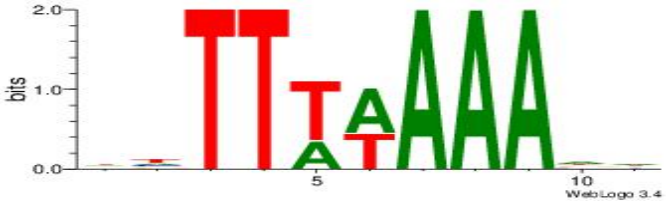
Dataset #:	4

Motif ID:	104
Motif name:	wtTTWwAAAaw
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	7
Similarity score:	0.0667775

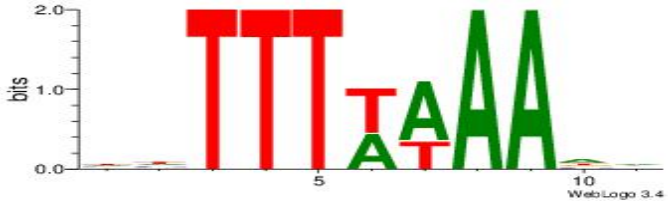
Alignment:

```
HHTTTWAAADD
----GRAAATG
```

Original motif Consensus sequence: HHTTTWAAADD



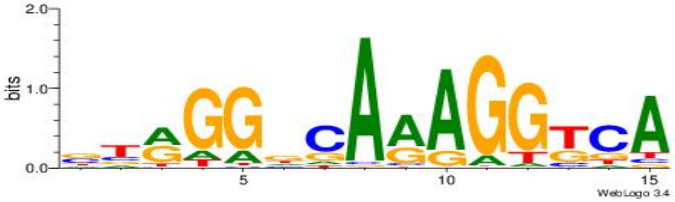
Reverse complement motif Consensus sequence: DDTTTWAAAHH



Dataset #:	3
Motif ID:	36
Motif name:	PPARGRXRA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	7
Similarity score:	0.0672334

Alignment:
TGRCCTKTGHCCKAB
---CATTTKC-----

Original motif Consensus sequence: BTRGGDCARAGGKCA



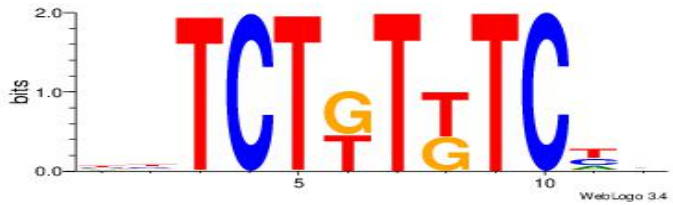
Reverse complement motif Consensus sequence: TGRCCTKTGHCCK

Dataset #:	4
Motif ID:	92
Motif name:	tyTCTkTkTCyy
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	7
Similarity score:	0.0684709

Alignment:
BBTCTKTKTCHB
---CATTTKC--

Original motif Consensus sequence: BBTCTKTKTCHB

Reverse complement motif Consensus sequence: VHGARAYAGAVV



Dataset #:	3
Motif ID:	38
Motif name:	NR2F1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	7
Similarity score:	0.0685715

Alignment:

```
TGAMCTTTGMMCYT
---CATTTKC----
```

Original motif Consensus sequence: TGAMCTTTGMMCYT

Reverse complement motif Consensus sequence: AKGYYCAAAGRTCA

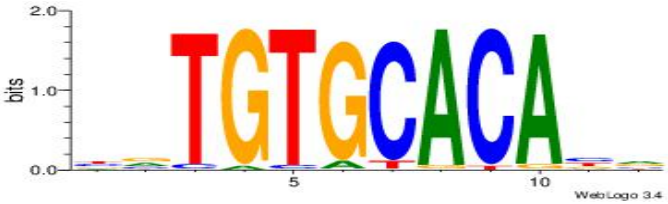
Dataset #:	4
Motif ID:	96

Motif name:	yrTGTGCACAyr
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	7
Similarity score:	0.0691109

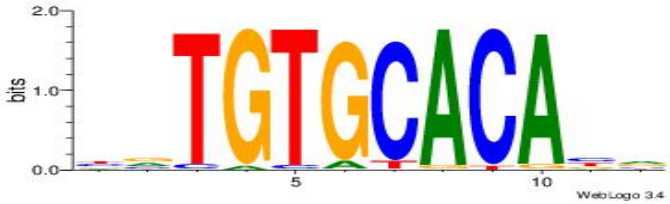
Alignment:

```
BVTGTGCACABV
CATTTKC-----
```

Original motif Consensus sequence: BVTGTGCACABV



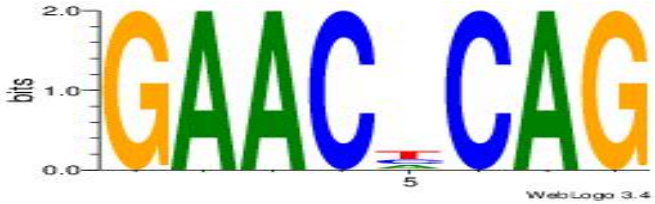
Reverse complement motif Consensus sequence: BBTGTGCACAVV



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

Original motif Consensus sequence: CTGDGTTC

Reverse complement motif Consensus sequence: GAACDCAG



Best Matches for Motif ID 16 (Highest to Lowest)

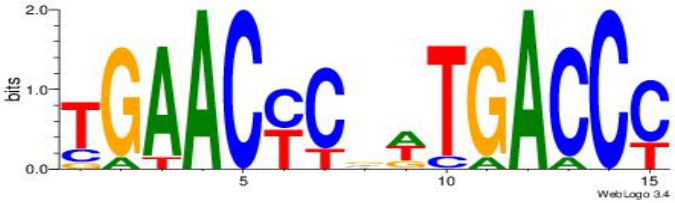
Dataset #:	3
Motif ID:	33
Motif name:	RXRAVDR
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	8
Similarity score:	0.0341587

Alignment:

```
GGGTCAWBGRGTTCA
------CTGDGTTC-
```

Original motif Consensus sequence: GGGTCAWBGRGTTCA

Reverse complement motif Consensus sequence: TGAACKCBWTGAC

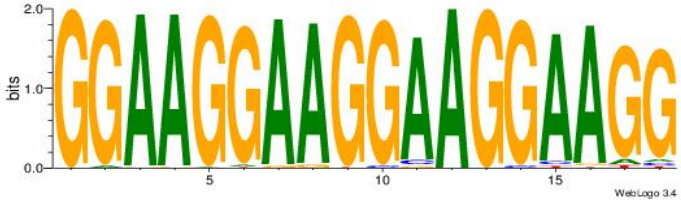


Dataset #:	3
Motif ID:	48
Motif name:	EWSR1-FLI1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	8

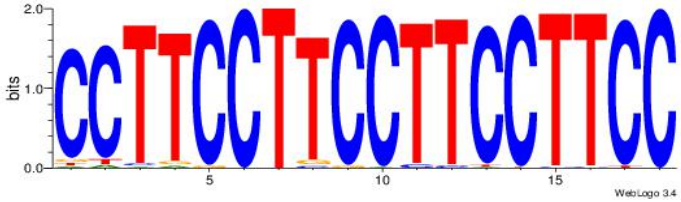
Similarity score: 0.0488413

Alignment:
GGAAGGAAGGAAGGAAGG
-----GAACDCAG-----

Original motif Consensus sequence: GGAAGGAAGGAAGGAAGG



Reverse complement motif Consensus sequence: CCTTCCTTCCTTCCTTCC

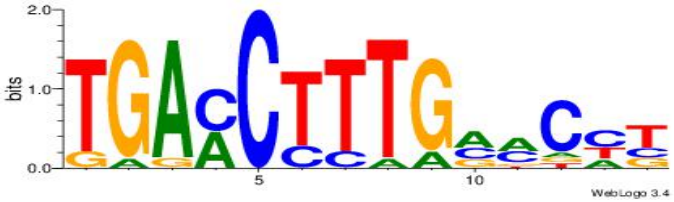


Dataset #: 3
Motif ID: 38
Motif name: NR2F1
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 6
Number of overlap: 8
Similarity score: 0.0594848

Alignment:
TGAMCTTTGMMCYT
-GAACDCAG-----

Original motif Consensus sequence: TGAMCTTTGMMCYT

Reverse complement motif Consensus sequence: AKGYYCAAAGRTC

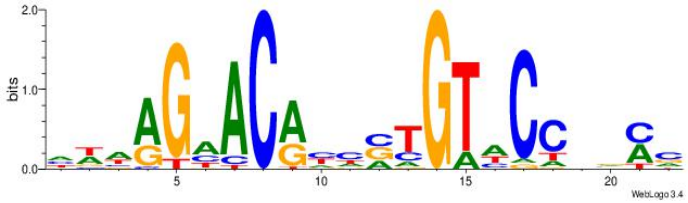


Dataset #:	3
Motif ID:	40
Motif name:	Ar
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	8
Similarity score:	0.0618424

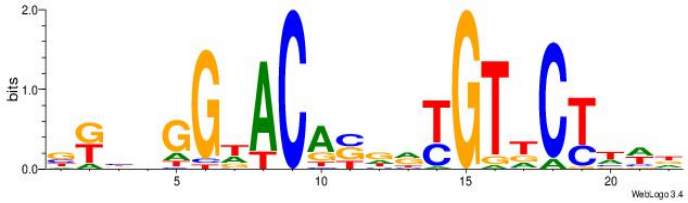
Alignment:

```
VRVDGGHACAVDDKGTHCTDWH
----------CTGDGTTC----
```

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH



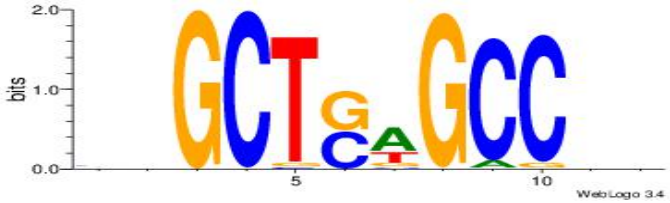
Dataset #:	4

Motif ID:	77
Motif name:	ssGCTswGCCms
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.0677701

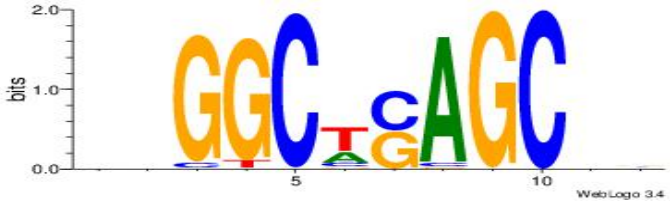
Alignment:

```
BDGGCTSAGCBV
-GAACDCAG---
```

Original motif Consensus sequence: VBGCTSAGCCHB



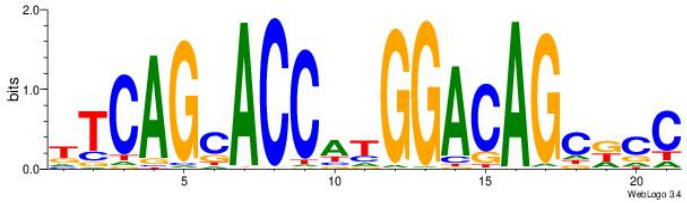
Reverse complement motif Consensus sequence: BDGGCTSAGCBV



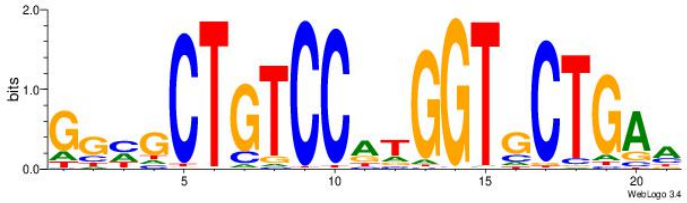
Dataset #:	3
Motif ID:	35
Motif name:	REST
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	8
Similarity score:	0.0698387

Alignment:
GGYGCTGTCCATGGTGCTGAA
---------CTGDGTTC----

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC



Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA

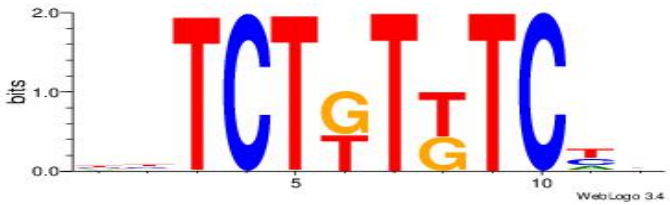


Dataset #:	4
Motif ID:	92
Motif name:	tyTCTkTkTCyy
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	8
Similarity score:	0.0714255

Alignment:
BBTCTKTKTCHB
---CTGDGTTC-

Original motif Consensus sequence: BBTCTKTKTCHB

Reverse complement motif Consensus sequence: VHGARAYAGAVV



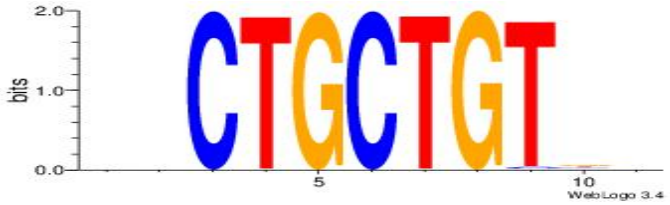
Dataset #:	4
Motif ID:	82
Motif name:	rmACAGCAGsr
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	8
Similarity score:	0.0725605

Alignment:

```
VVACAGCAGVD
-GAACDCAG--
```

Original motif Consensus sequence: VVACAGCAGVD

Reverse complement motif Consensus sequence: DVCTGCTGTVB



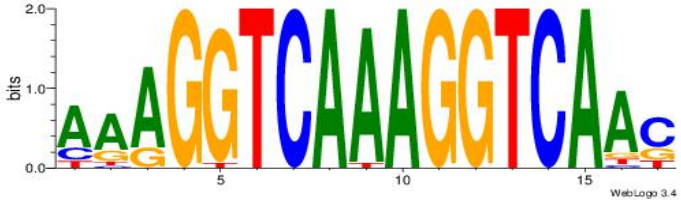
Dataset #:	3
Motif ID:	59

Motif name:	NR1H2RXRA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.0734192

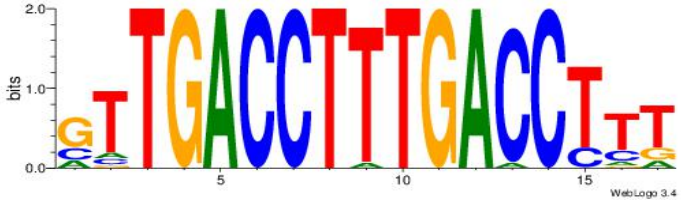
Alignment:

```
AAAGGTCAAAGGTCAAC
------CTGDGTTC---
```

Original motif Consensus sequence: AAAGGTCAAAGGTCAAC



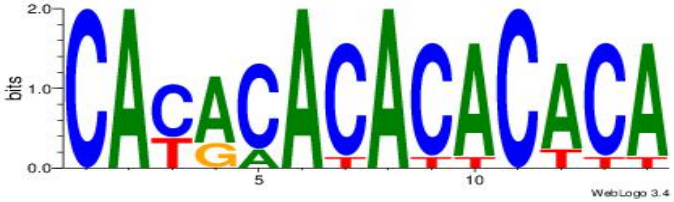
Reverse complement motif Consensus sequence: GTTGACCTTTGACCTTT



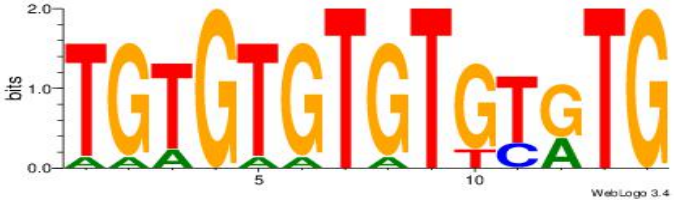
Dataset #:	2
Motif ID:	27
Motif name:	Motif 27
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0.0745877

Alignment:
CAYACACACACACA
---GAACDCAG---

Original motif Consensus sequence: CAYACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTKT



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

Original motif Consensus sequence: RGGAAR

Reverse complement motif Consensus sequence: MTTCCK

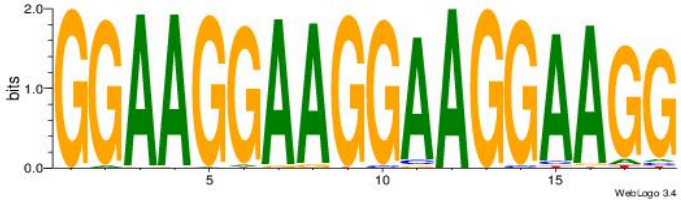
Best Matches for Motif ID 17 (Highest to Lowest)

Dataset #:	3
Motif ID:	48
Motif name:	EWSR1-FLI1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	12

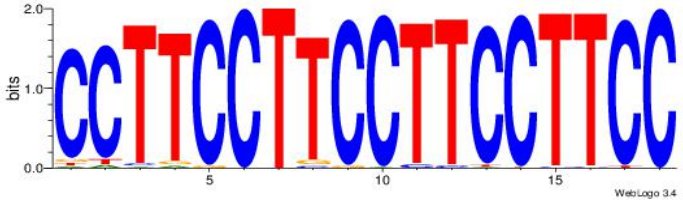
Number of overlap: 6
Similarity score: 0.0146511

Alignment:
GGAAGGAAGGAAGGAAGG
----------RGGAAR-

Original motif Consensus sequence: GGAAGGAAGGAAGGAAGG



Reverse complement motif Consensus sequence: CCTTCCTTCCTTCCTTCC

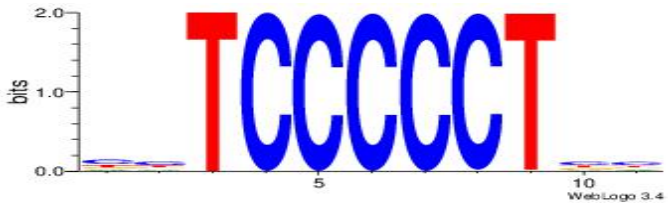


Dataset #: 4
Motif ID: 93
Motif name: rrAGGGGGArr
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 1
Number of overlap: 6
Similarity score: 0.0442472

Alignment:
VVAGGGGGAVV
-----RGGAAR

Original motif Consensus sequence: VVAGGGGGAVV

Reverse complement motif Consensus sequence: VVTCCCCCTVV

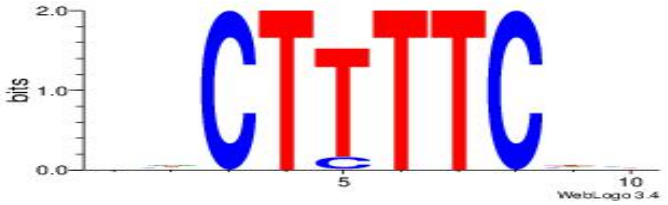


Dataset #:	4
Motif ID:	68
Motif name:	dwCTTTTCwy
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	6
Similarity score:	0.0560955

Alignment:

```
DHGAAAAGHD
RGGAAR----
```

Original motif Consensus sequence: DHCTTTTCHH



Reverse complement motif Consensus sequence: DHGAAAAGHD

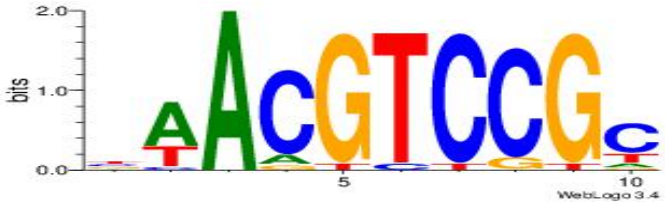
Dataset #:	3
Motif ID:	53

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 Consensus sequence: BAACGTCCGC

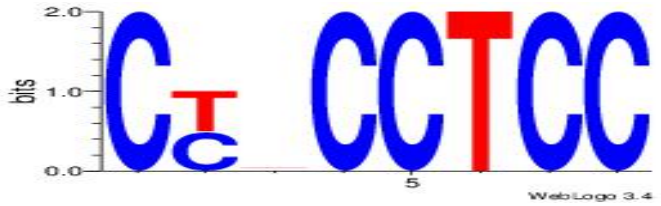


Reverse complement motif Consensus sequence: GCGGACGTTV

Dataset #:	1
Motif ID:	4
Motif name:	Motif 4
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	6
Similarity score:	0.0620308

Alignment:
GGAGGVMG
RGGAAR--

Original motif Consensus sequence: CYBCCTCC



Reverse complement motif Consensus sequence: GGAGGVMG

Dataset #:	3
Motif ID:	57
Motif name:	MZF1_5-13
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:	0.0753789

Alignment:
BKAGGGGDAD
----RGGAAR

Original motif Consensus sequence: BKAGGGGDAD

Reverse complement motif Consensus sequence: BTHCCCCTYB

Dataset #:	3
Motif ID:	58
Motif name:	NFKB1
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	6
Similarity score:	0.0757695

Alignment:

```
GGGGAAKCCCC
-RGGAAR----
```

Original motif Consensus sequence: GGGGRTTCCCC

Reverse complement motif Consensus sequence: GGGGAAKCCCC

Dataset #:	1
Motif ID:	13

Motif name:	Motif 13
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	6
Similarity score:	0.0767512

Alignment:

```
GAGRCAGR
-RGGAAR-
```

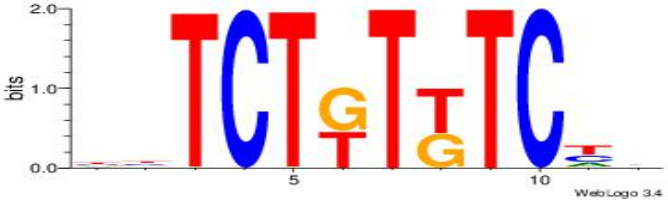
Original motif Consensus sequence: GAGRCAGR

Reverse complement motif Consensus sequence: MCTGKCTC

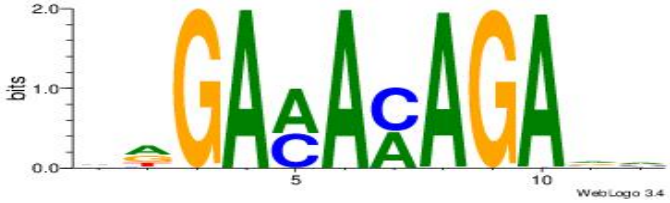
Dataset #:	4
Motif ID:	92
Motif name:	tyTCTkTkTCyy
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	7
Number of overlap:	6
Similarity score:	0.0768115

Alignment:
BBTCTKTKTCHB
MTTCCK------

Original motif Consensus sequence: BBTCTKTKTCHB



Reverse complement motif Consensus sequence: VHGARAYAGAVV

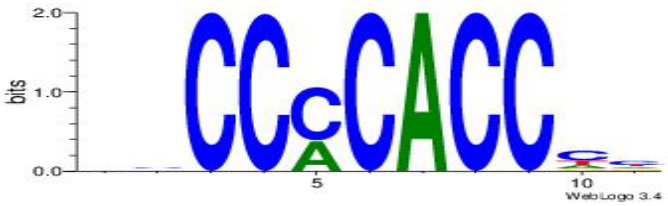


Dataset #:	4
Motif ID:	89
Motif name:	ccCCmCACCcc
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	6
Similarity score:	0.0794812

Alignment:
DDGGTGRGGBD
-RGGAAR----

Original motif Consensus sequence: HBCCMCACCHH

Reverse complement motif Consensus sequence: DDGGTGRGGBD



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

Original motif Consensus sequence: AMACA

Reverse complement motif Consensus sequence: TGTRT

Best Matches for Motif ID 18 (Highest to Lowest)

Dataset #:	1
Motif ID:	2
Motif name:	Motif 2
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	5
Similarity score:	0

Alignment:

```
CACACACA
---AMACA
```

Original motif Consensus sequence: CACACACA

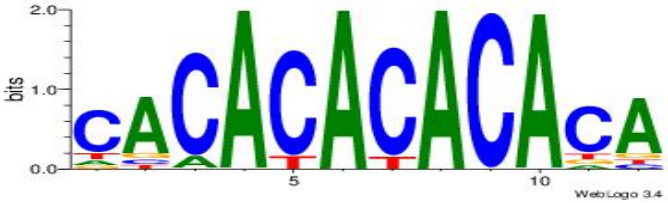
Reverse complement motif Consensus sequence: TGTGTGTG

Dataset #:	4
Motif ID:	79
Motif name:	CACACACACACA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	5
Similarity score:	0.0148279

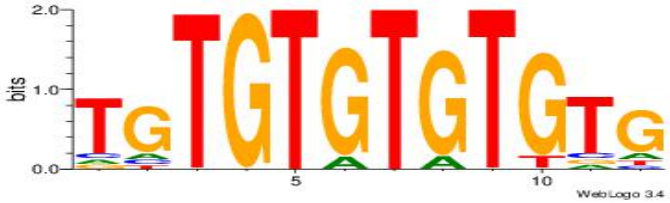
Alignment:

```
TGTGTGTGTGTG
--TGTRT-----
```

Original motif Consensus sequence: CACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTG

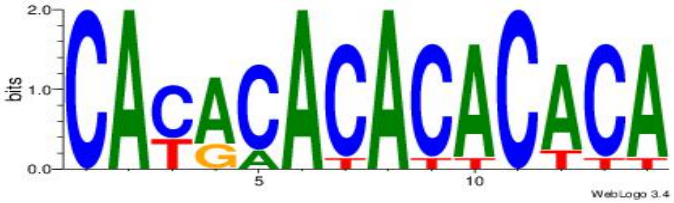


Dataset #:	2
Motif ID:	27
Motif name:	Motif 27
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	5
Similarity score:	0.0192752

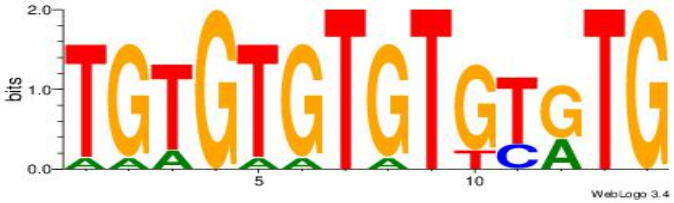
Alignment:

```
CAYACACACACACA
-----AMACA----
```

Original motif Consensus sequence: CAYACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTKT

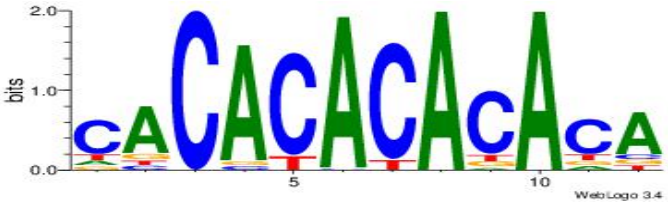


Dataset #:	4
Motif ID:	95
Motif name:	CACACACACACA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	5

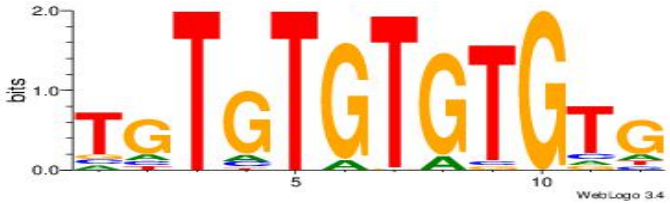
Similarity score: 0.0228414

Alignment:
CACACACACACA
---AMACA----

Original motif Consensus sequence: CACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTG

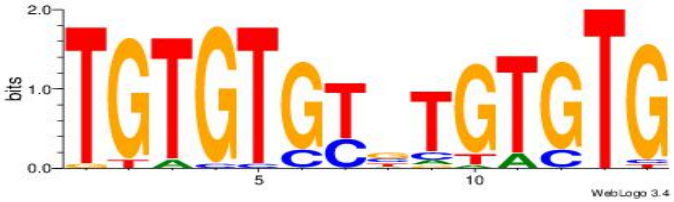


Dataset #: 2
Motif ID: 25
Motif name: Motif 25
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 10
Number of overlap: 5
Similarity score: 0.0233505

Alignment:
CACACAVRCACACA
---------AMACA

Original motif Consensus sequence: CACACAVRCACACA

Reverse complement motif Consensus sequence: TGTGTGKVTGTGT



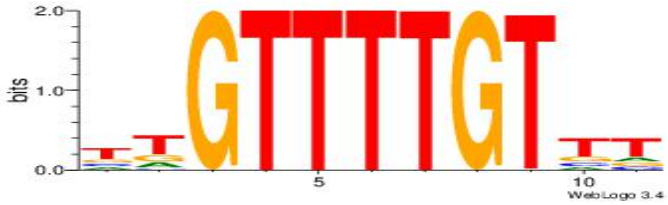
Dataset #:	4
Motif ID:	69
Motif name:	aaACAAAACaa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	5
Similarity score:	0.0274014

Alignment:

```
AAACAAAACAA
-----AMACA-
```

Original motif Consensus sequence: AAACAAAACAA

Reverse complement motif Consensus sequence: TTGTTTTGTTT



Dataset #:	4
Motif ID:	86

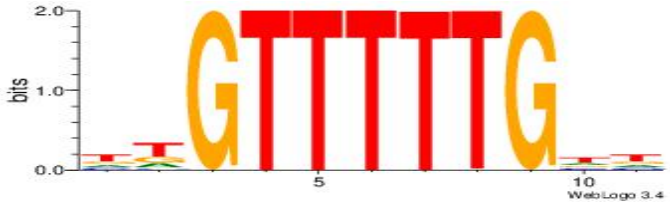
Motif name:	aaCAAAAACaa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	5
Similarity score:	0.0291354

Alignment:

```
HHCAAAAACAH
-----AMACA-
```

Original motif Consensus sequence: HHCAAAAACAH

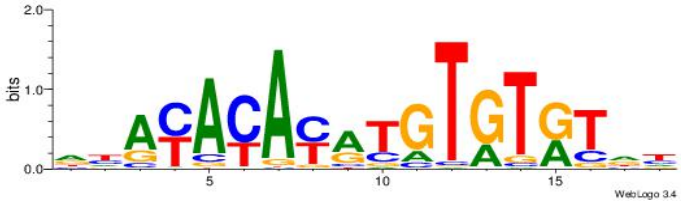
Reverse complement motif Consensus sequence: HTGTTTTTGHH



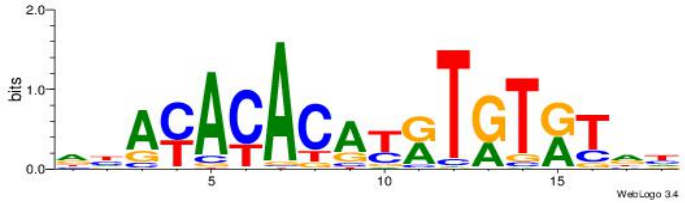
Dataset #:	4
Motif ID:	97
Motif name:	ryayAyAyrtGTRTrTry
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	10
Number of overlap:	5
Similarity score:	0.0293401

Alignment:
HDAMACACAKKTKTKTHD
----AMACA---------

Original motif Consensus sequence: DHAYAYAYRTGTGTRTDH



Reverse complement motif Consensus sequence: HDAMACACAKKTKTKTHD



Dataset #:	4
Motif ID:	100
Motif name:	wrTGTATACAyw
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	5
Similarity score:	0.0302831

Alignment:
HDTGTATACAHD
--TGTRT-----

Original motif Consensus sequence: HDTGTATACAHD

Reverse complement motif Consensus sequence: DHTGTATACADH

Dataset #:	1
Motif ID:	5
Motif name:	Motif 5
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	5
Similarity score:	0.0378142

Alignment:

```
AAAASAAA
-AMACA--
```

Original motif Consensus sequence: AAAASAAA

Reverse complement motif Consensus sequence: TTTSTTTT

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

Original motif Consensus sequence: AGSCWGG

Reverse complement motif Consensus sequence: CCWGSCT

Best Matches for Motif ID 19 (Highest to Lowest)

Dataset #:	1
Motif ID:	13
Motif name:	Motif 13
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:	0.0206869

Alignment:

```
MCTGKCTC
CCWGSCT-
```

Original motif Consensus sequence: GAGRCAGR

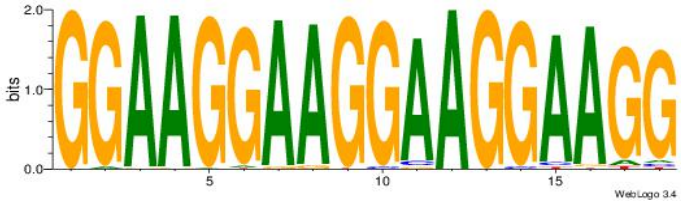
Reverse complement motif Consensus sequence: MCTGKCTC

Dataset #:	3
Motif ID:	48
Motif name:	EWSR1-FLI1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8
Number of overlap:	7
Similarity score:	0.0395671

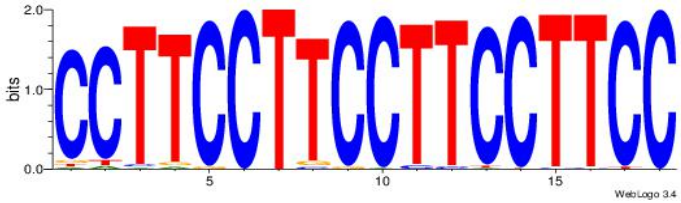
Alignment:

```
GGAAGGAAGGAAGGAAGG
-------AGSCWGG----
```

Original motif Consensus sequence: GGAAGGAAGGAAGGAAGG



Reverse complement motif Consensus sequence: CCTTCCTTCCTTCCTTCC

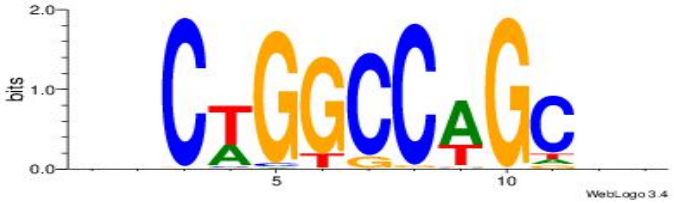


Dataset #:	4
Motif ID:	80
Motif name:	ssCwGGCCwGCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1

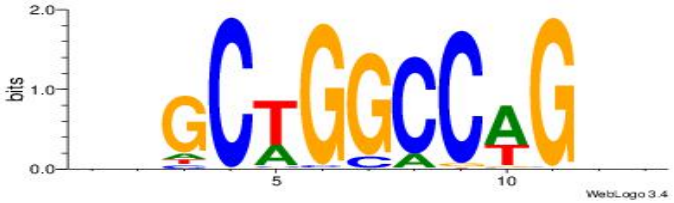
Number of overlap: 7
Similarity score: 0.0484872

Alignment:
BBCWGGCCAGCBB
------CCWGSCT

Original motif Consensus sequence: BBCWGGCCAGCBB



Reverse complement motif Consensus sequence: BBGCTGGCCWGBI

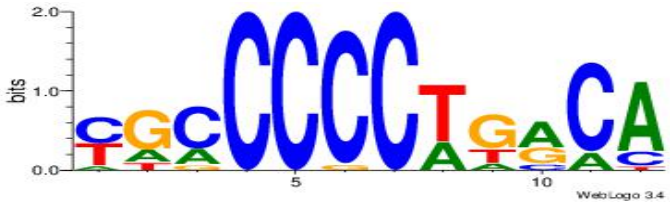


Dataset #: 3
Motif ID: 51
Motif name: INSM1
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 7
Similarity score: 0.0494688

Alignment:
TGYCAGGGGGCR
AGSCWGG-----

Original motif Consensus sequence: TGYCAGGGGGCR

Reverse complement motif Consensus sequence: MGCCCCCTGMCA

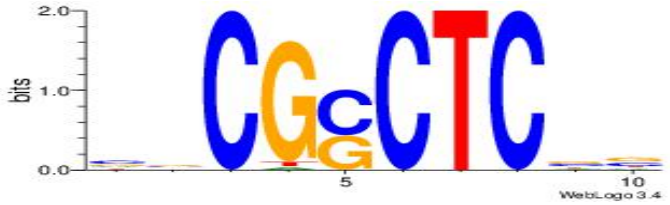


Dataset #:	4
Motif ID:	73
Motif name:	ssCGsCTCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	7
Similarity score:	0.054651

Alignment:

```
BBGAGSCGVV
---AGSCWGG
```

Original motif Consensus sequence: VVCGSCTCBB



Reverse complement motif Consensus sequence: BBGAGSCGVV

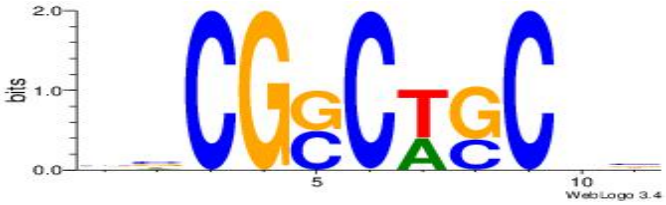
Dataset #:	4
Motif ID:	90

Motif name:	ssCGsCwsCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	7
Similarity score:	0.0578314

Alignment:

```
BBCGSCWSCBB
--AGSCWGG--
```

Original motif Consensus sequence: BBCGSCWSCBB

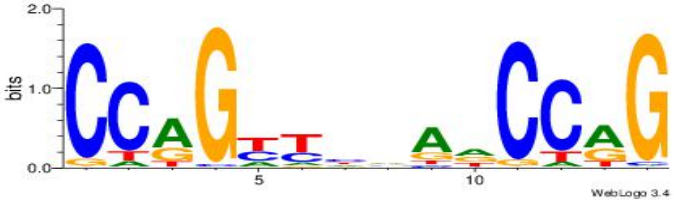


Reverse complement motif Consensus sequence: BBGSWGSCGBB

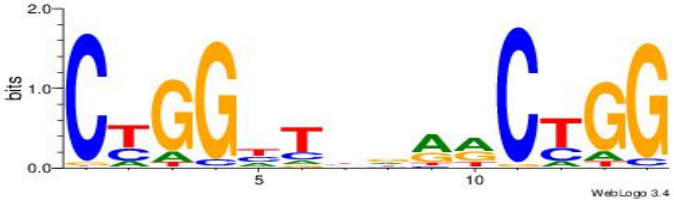
Dataset #:	3
Motif ID:	64
Motif name:	Tcfcp2l1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	7
Similarity score:	0.0669354

Alignment:
CCAGYYHVADCCRG
CCWGSCT-------

Original motif Consensus sequence: CCAGYYHVADCCRG



Reverse complement motif Consensus sequence: CKGGDTBDMMCT

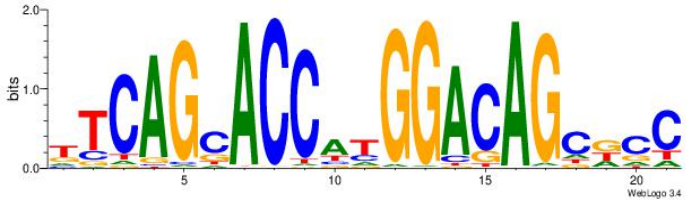


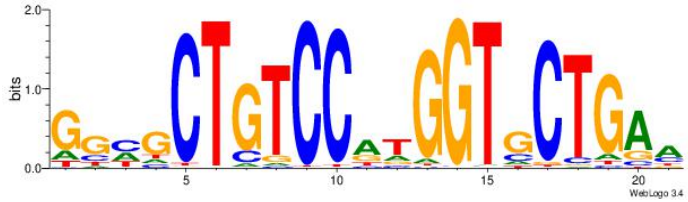
Dataset #:	3
Motif ID:	35
Motif name:	REST
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	9
Number of overlap:	7
Similarity score:	0.0693747

Alignment:
TTCAGCACCATGGACAGCKCC
------AGSCWGG--------

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC

Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA



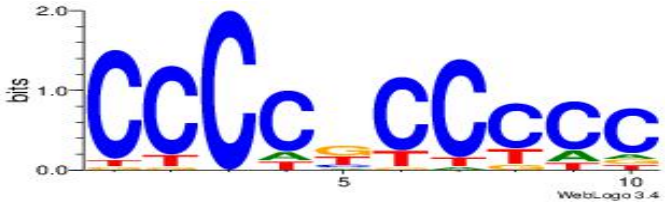


Dataset #:	3
Motif ID:	32
Motif name:	SP1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	7
Similarity score:	0.0695377

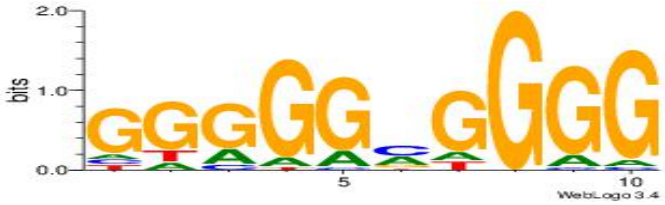
Alignment:

```
CCCCKCCCCC
-CCWGSCT--
```

Original motif Consensus sequence: CCCCKCCCCC



Reverse complement motif Consensus sequence: GGGGGYGGGG



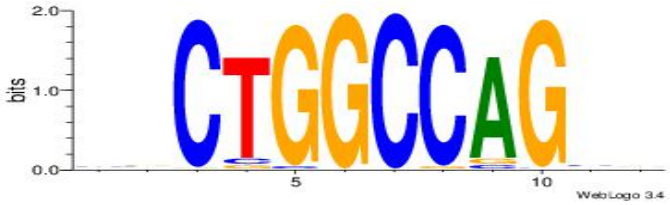
Dataset #:	4
Motif ID:	99

Motif name:	sgCTGGCCAGcs
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	7
Similarity score:	0.0697712

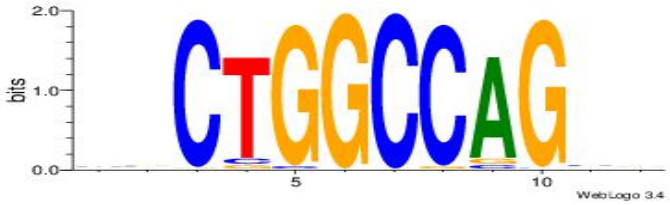
Alignment:

```
BBCTGGCCAGVV
-CCWGSCT----
```

Original motif Consensus sequence: BBCTGGCCAGVV



Reverse complement motif Consensus sequence: VVCTGGCCAGBB



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

Original motif Consensus sequence: CTCTGY

Reverse complement motif Consensus sequence: KCAGAG

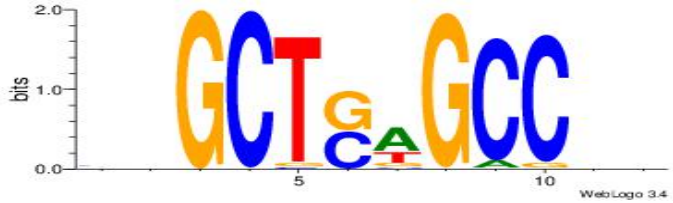
Best Matches for Motif ID 20 (Highest to Lowest)

Dataset #:	4
Motif ID:	77
Motif name:	ssGCTswGCCms
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	6
Similarity score:	0.0323407

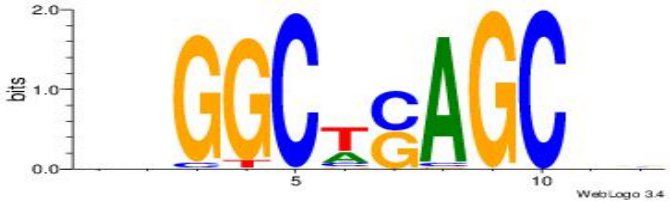
Alignment:

```
VBGCTSAGCCHB
---CTCTGY---
```

Original motif Consensus sequence: VBGCTSAGCCHB



Reverse complement motif Consensus sequence: BDGGCTSAGCBV



Dataset #:	1
Motif ID:	7
Motif name:	Motif 7
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: 0.0352938

Alignment:
ASASAGAA
--KCAGAG

Original motif Consensus sequence: ASASAGAA

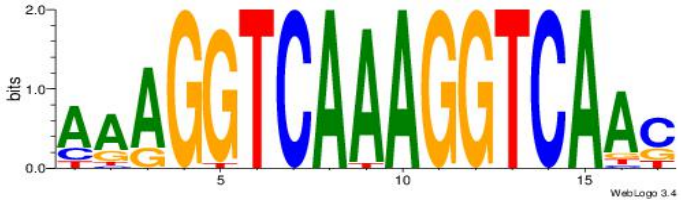
Reverse complement motif Consensus sequence: TTCTSTST

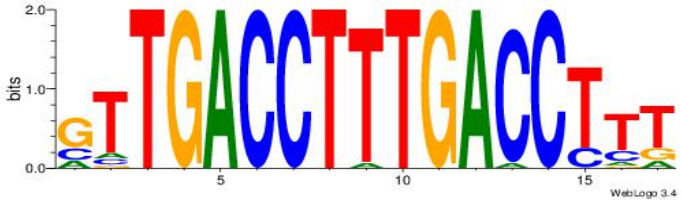
Dataset #: 3
Motif ID: 59
Motif name: NR1H2RXRA
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 7
Number of overlap: 6
Similarity score: 0.0398495

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

Original motif Consensus sequence: AAAGGTCAAAGGTCAAC

Reverse complement motif Consensus sequence: GTTGACCTTTGACCTTT



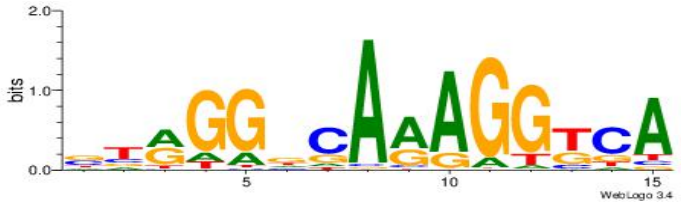


Dataset #:	3
Motif ID:	36
Motif name:	PPARGRXRA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	6
Similarity score:	0.0415907

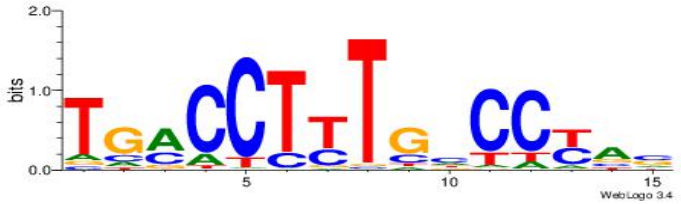
Alignment:

```
BTRGGDCARAGGKCA
-----KCAGAG----
```

Original motif Consensus sequence: BTRGGDCARAGGKCA



Reverse complement motif Consensus sequence: TGRCCTKTGHCCK



Dataset #:	1
Motif ID:	11

Motif name:	Motif 11
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	6
Similarity score:	0.0430865

Alignment:

```
CCGCCGCC
-CTCTGY-
```

Original motif Consensus sequence: CCGCCGCC

Reverse complement motif Consensus sequence: GGCGGCGG

Dataset #:	4
Motif ID:	72
Motif name:	ssCKCwsCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	6
Similarity score:	0.0439226

Alignment:
BVCGCWSCGBV
----CTCTGY-

Original motif Consensus sequence: BVCGCWSCGBV

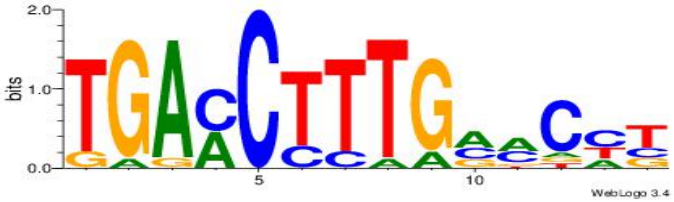
Reverse complement motif Consensus sequence: VBCGSWGCGVB

Dataset #:	3
Motif ID:	38
Motif name:	NR2F1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	6
Similarity score:	0.0462597

Alignment:
AKGYYCAAAGRTCA
----KCAGAG----

Original motif Consensus sequence: TGAMCTTTGMMCYT

Reverse complement motif Consensus sequence: AKGYYCAAAGRTCA

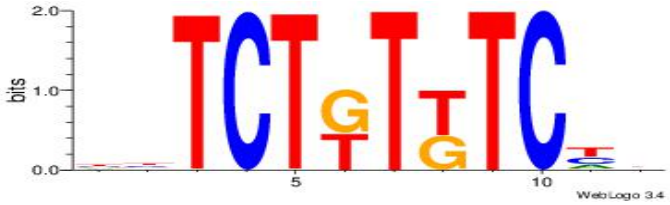


Dataset #:	4
Motif ID:	92
Motif name:	tyTCTkTkTCyy
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	6
Similarity score:	0.0467436

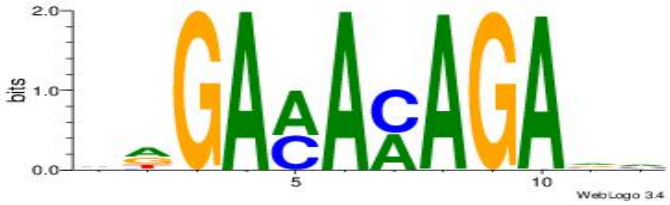
Alignment:

```
BBTCTKTKTCHB
-CTCTGY-----
```

Original motif Consensus sequence: BBTCTKTKTCHB



Reverse complement motif Consensus sequence: VHGARAYAGAVV



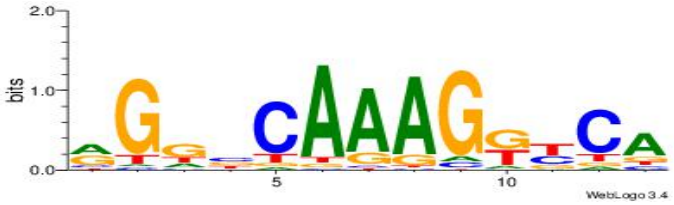
Dataset #:	3
Motif ID:	50

Motif name:	HNF4A
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:	0.0481824

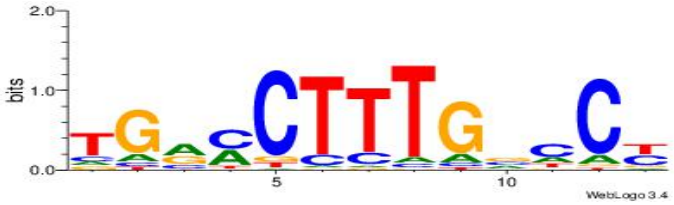
Alignment:

```
RGGBCAAAGKYCA
---KCAGAG----
```

Original motif Consensus sequence: RGGBCAAAGKYCA



Reverse complement motif Consensus sequence: TGMYCTTTGBCCK

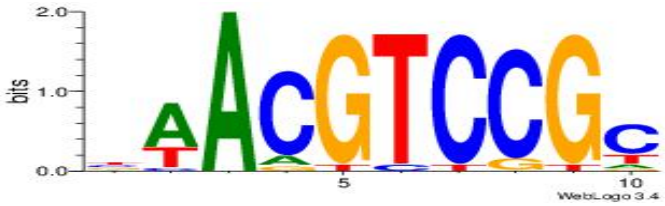


Dataset #:	3
Motif ID:	53
Motif name:	MIZF
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	6
Similarity score:	0.049747

Alignment:

```
BAACGTCCGC
----CTCTGY
```

Original motif Consensus sequence: BAACGTCCGC



Reverse complement motif Consensus sequence: GCGGACGTTV

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

Original motif Consensus sequence: ATKTM

Reverse complement motif Consensus sequence: RARAT

Best Matches for Motif ID 21 (Highest to Lowest)

Dataset #:	1
Motif ID:	15
Motif name:	Motif 15
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2

Number of overlap: 5
Similarity score: 0.0065927

Alignment:
CATTTKC
-ATKTM-

Original motif Consensus sequence: GRAAATG

Reverse complement motif Consensus sequence: CATTTKC

Dataset #: 1
Motif ID: 10
Motif name: Motif 10
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 2
Number of overlap: 5
Similarity score: 0.0217628

Alignment:
TAMATA
-RARAT

Original motif Consensus sequence: TAMATA

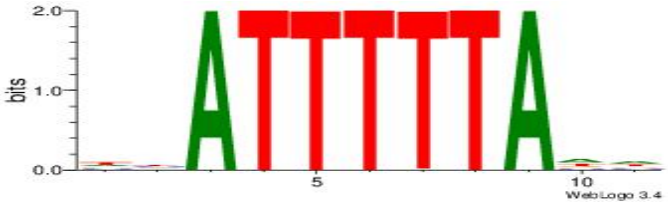
Reverse complement motif Consensus sequence: TATRTA

Dataset #:	4
Motif ID:	85
Motif name:	wtATTTTTAww
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	5
Similarity score:	0.0314602

Alignment:

```
DDTAAAAATHD
----RARAT--
```

Original motif Consensus sequence: DHATTTTTADD



Reverse complement motif Consensus sequence: DDTAAAAATHD

Dataset #:	4
Motif ID:	71

Motif name:	wyATTTTAww
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	5
Similarity score:	0.0314958

Alignment:

```
DDTAAAATHD
---RARAT--
```

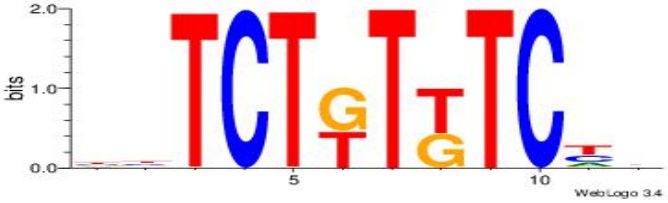
Original motif Consensus sequence: DHATTTTADD

Reverse complement motif Consensus sequence: DDTAAAATHD

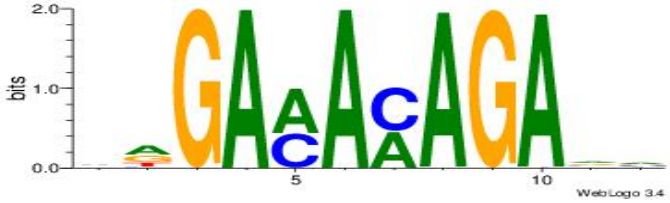
Dataset #:	4
Motif ID:	92
Motif name:	tyTCTkTkTCyy
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	5
Similarity score:	0.0326182

Alignment:
VHGARAYAGAVV
--RARAT-----

Original motif Consensus sequence: BBTCTKTKTCHB



Reverse complement motif Consensus sequence: VHGARAYAGAVV



Dataset #:	4
Motif ID:	74
Motif name:	twTACATAvw
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	5
Similarity score:	0.0335447

Alignment:
DBTATGTAHH
---ATKTM--

Original motif Consensus sequence: HHTACATAVD

Reverse complement motif Consensus sequence: DBTATGTAHH

Dataset #:	4
Motif ID:	83
Motif name:	wwTAAAwAww
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	5
Similarity score:	0.0514182

Alignment:

```
HHTWTTTADD
---ATKTM--
```

Original motif Consensus sequence: DDTAAAWAHH

Reverse complement motif Consensus sequence: HHTWTTTADD

Dataset #:	4
Motif ID:	76

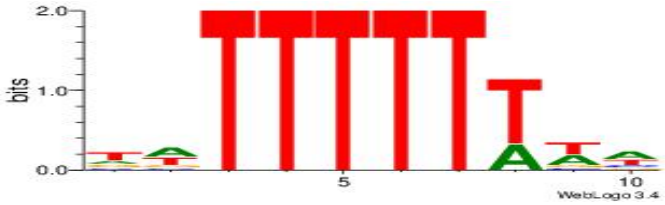
Motif name:	wwWAAAAAwa
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	5
Similarity score:	0.0597589

Alignment:

```
WWAAAAAAWH
----RARAT-
```

Original motif Consensus sequence: WWAAAAAAWH

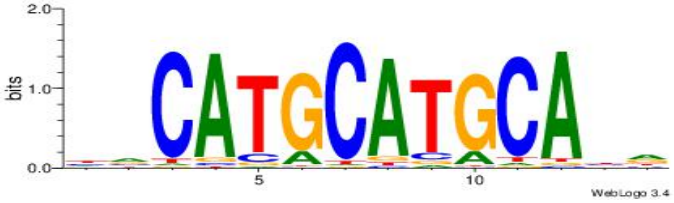
Reverse complement motif Consensus sequence: HWTTTTTTWW



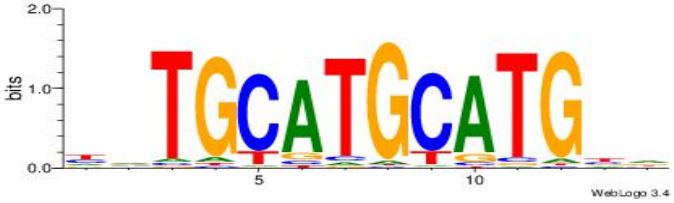
Dataset #:	4
Motif ID:	101
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	10
Number of overlap:	5
Similarity score:	0.0609742

Alignment:
DVTGCATGCATGBH
---------ATKTM

Original motif Consensus sequence: HVCATGCATGCABD



Reverse complement motif Consensus sequence: DVTGCATGCATGB



Dataset #:	4
Motif ID:	100
Motif name:	wrTGTATACAyw
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	5
Similarity score:	0.0620607

Alignment:
DHTGTATACADH
-ATKTM------

Original motif Consensus sequence: HDTGTATACAHD

Reverse complement motif Consensus sequence: DHTGTATACADH

Dataset #: 2 Motif ID: 22 Motif name: Motif 22

Original motif Consensus sequence: CMGCRGC

Reverse complement motif Consensus sequence: GCKGCYG

Best Matches for Motif ID 22 (Highest to Lowest)

Dataset #:	1
Motif ID:	11
Motif name:	Motif 11
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	7
Similarity score:	0.0224079

Alignment:

```
CCGCCGCC
CMGCRGC-
```

Original motif Consensus sequence: CCGCCGCC

Reverse complement motif Consensus sequence: GGCGGCGG

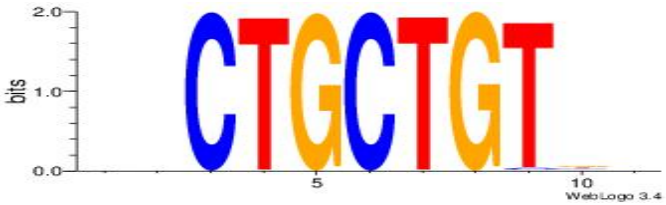
Dataset #:	4
Motif ID:	82
Motif name:	rmACAGCAGsr
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	7
Similarity score:	0.0263091

Alignment:

```
VVACAGCAGVD
---CMGCRGC-
```

Original motif Consensus sequence: VVACAGCAGVD

Reverse complement motif Consensus sequence: DVCTGCTGTVB

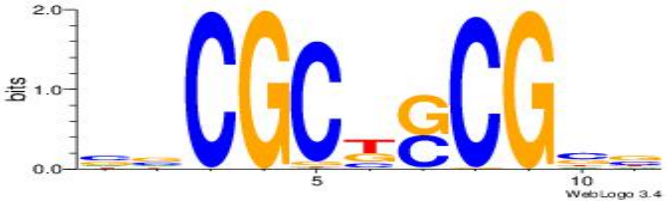


Dataset #:	4
Motif ID:	94
Motif name:	ssCGCksCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	7
Similarity score:	0.0468409

Alignment:

```
BBCGSRGCGVV
-CMGCRGC---
```

Original motif Consensus sequence: VVCGCKSCGBB



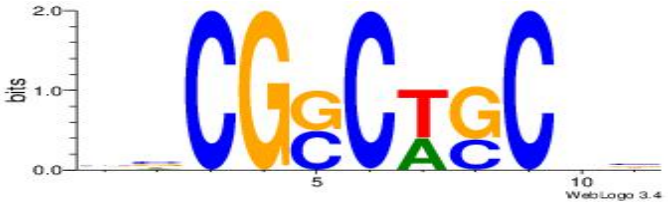
Reverse complement motif Consensus sequence: BBCGSRGCGVV

Dataset #:	4
Motif ID:	90
Motif name:	ssCGsCwsCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	7

Similarity score: 0.0481413

Alignment:
BBGSWGSCGBB
--GCKGCYG--

Original motif Consensus sequence: BBCGSCWSCBB



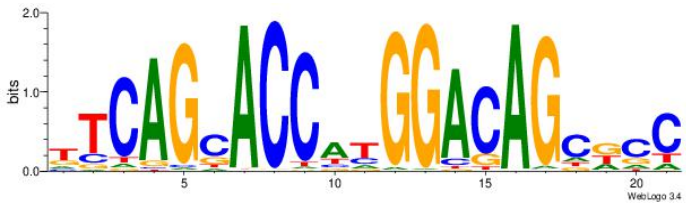
Reverse complement motif Consensus sequence: BBGSWGSCGBB

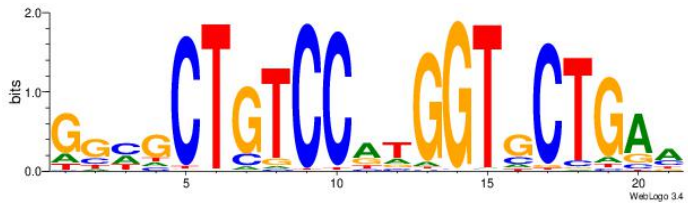
Dataset #: 3
Motif ID: 35
Motif name: REST
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 13
Number of overlap: 7
Similarity score: 0.0604814

Alignment:
TTCAGCACCATGGACAGCKCC
--CMGCRGC----------

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC

Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA



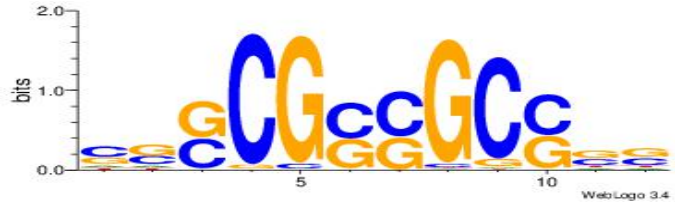


Dataset #:	4
Motif ID:	78
Motif name:	sssCGssGCsss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	7
Similarity score:	0.0620984

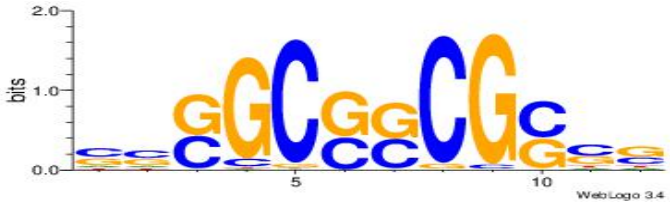
Alignment:

```
SSSCGSSGCSSS
--CMGCRGC---
```

Original motif Consensus sequence: SSSCGSSGCSSS



Reverse complement motif Consensus sequence: SSSGCSSCGSSS



Dataset #:	4
Motif ID:	84

Motif name:	wsAGCTACwy
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	7
Similarity score:	0.0669388

Alignment:

```
VHGTAGCTVD
CMGCRGC---
```

Original motif Consensus sequence: DVAGCTACHB

Reverse complement motif Consensus sequence: VHGTAGCTVD

Dataset #:	1
Motif ID:	6
Motif name:	Motif 6
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	7
Similarity score:	0.0712961

Alignment:
CCCCRCCC
CMGCRGC-

Original motif Consensus sequence: CCCCRCCC

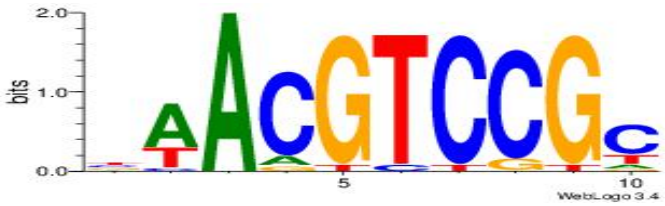
Reverse complement motif Consensus sequence: GGGKGGGG

Dataset #:	3
Motif ID:	53
Motif name:	MIZF
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:	0.0721831

Alignment:
GCGGACGTTV
GCKGCYG---

Original motif Consensus sequence: BAACGTCCGC

Reverse complement motif Consensus sequence: GCGGACGTTV



Dataset #:	4
Motif ID:	72
Motif name:	ssCKCwsCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	7
Similarity score:	0.0730352

Alignment:

```
VBCGSWGCGVB
-CMGCRGC---
```

Original motif Consensus sequence: BVCGCWSCGBV

Reverse complement motif Consensus sequence: VBCGSWGCGVB

Dataset #: 2 Motif ID: 23 Motif name: Motif 23

Original motif Consensus sequence: CCCRCCCC

Reverse complement motif Consensus sequence: GGGGMGGG

Best Matches for Motif ID 23 (Highest to Lowest)

Dataset #:	1
Motif ID:	6
Motif name:	Motif 6
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	8
Similarity score:	0.0476511

Alignment:

GGGKGGGG

GGGGMGGG

Original motif Consensus sequence: CCCCRCCC

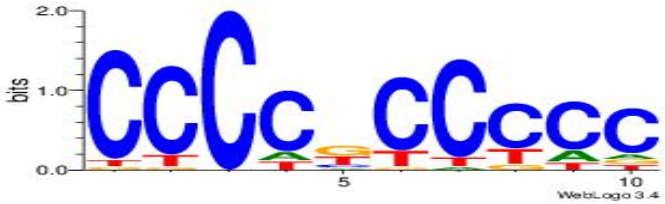
Reverse complement motif Consensus sequence: GGGKGGGG

Dataset #:	3
Motif ID:	32
Motif name:	SP1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	8
Similarity score:	0.05625

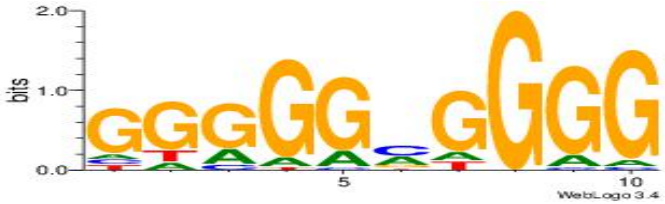
Alignment:

```
CCCCKCCCCC
-CCCRCCCC-
```

Original motif Consensus sequence: CCCCKCCCCC



Reverse complement motif Consensus sequence: GGGGGYGGGG



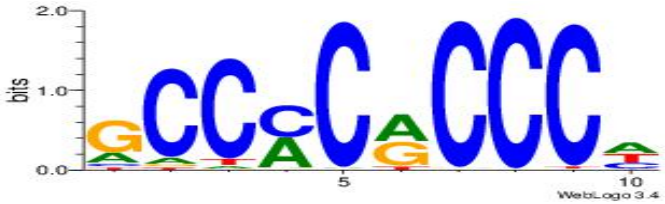
Dataset #:	3
Motif ID:	52
Motif name:	Klf4
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	8

Similarity score: 0.0600533

Alignment:
DGGGYGKGGC
GGGGMGGG--

Original motif Consensus sequence: DGGGYGKGGC

Reverse complement motif Consensus sequence: GCCYCMCCCD



Dataset #: 4
Motif ID: 89
Motif name: ccCCmCACCcc
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 4
Number of overlap: 8
Similarity score: 0.0605366

Alignment:
HBCCMCACCHH
---CCCRCCCC

Original motif Consensus sequence: HBCCMCACCHH

Reverse complement motif Consensus sequence: DDGGTGRGGBD

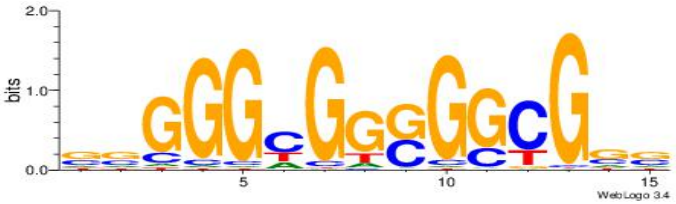
Dataset #:	4
Motif ID:	91
Motif name:	ssCGCCsCCrCCCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	7
Number of overlap:	8
Similarity score:	0.0617989

Alignment:

```
SSCGCCSCCGCCCSS
------CCCRCCCC-
```

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS



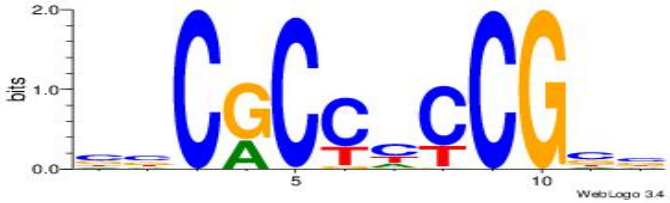
Dataset #: 4

Motif ID:	88
Motif name:	ssCrCYyYCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	8
Similarity score:	0.0740354

Alignment:

```
BBCRCCYCCGBB
CCCRCCCC----
```

Original motif Consensus sequence: BBCRCCYCCGBB



Reverse complement motif Consensus sequence: BBCGGKGGMGBB

Dataset #:	3
Motif ID:	44
Motif name:	Egr1
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0.0789263

Alignment:
YCGCCCACGCH
---CCCRCCCC

Original motif Consensus sequence: HGCGTGGGCGK

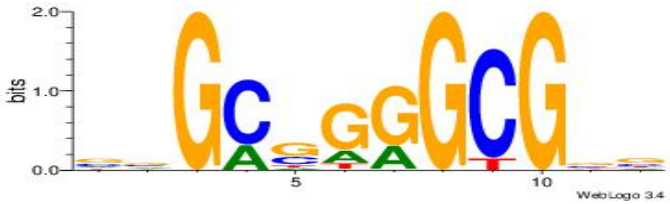
Reverse complement motif Consensus sequence: YCGCCCACGCH

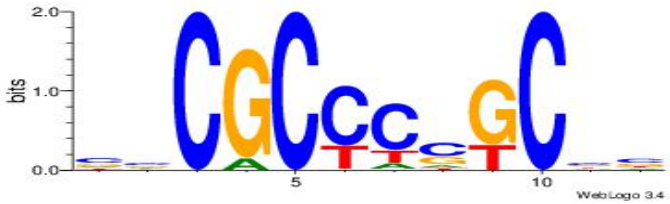
Dataset #:	4
Motif ID:	67
Motif name:	ssGMsGRGCGss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	8
Similarity score:	0.0848347

Alignment:
VVGCSGGGCGBB
----GGGGMGGG

Original motif Consensus sequence: VVGCSGGGCGBB

Reverse complement motif Consensus sequence: BBCGCCCSGCVV

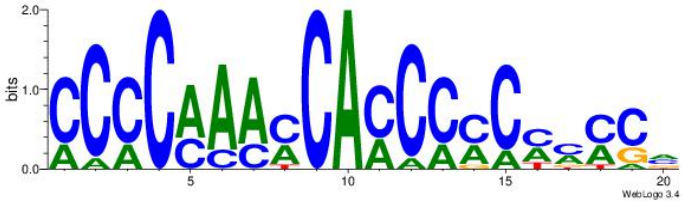




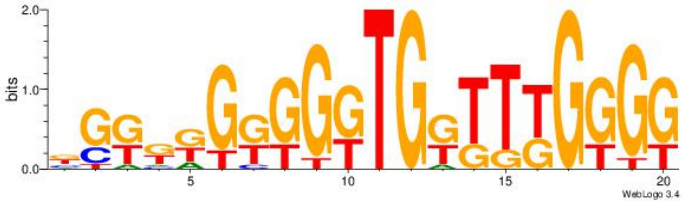
Dataset #: 3
Motif ID: 34
Motif name: RREB1
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 7
Number of overlap: 8
Similarity score: 0.0902899

Alignment:
CCCCMAAMCAMCCMCMMMCV
------CCCRCCCC------

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG



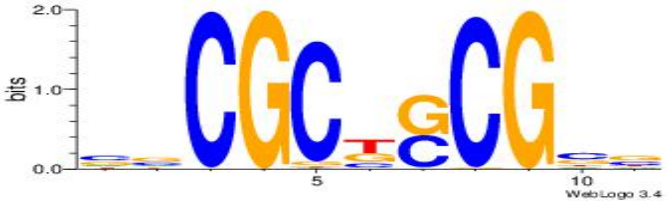
Dataset #: 4

Motif ID:	94
Motif name:	ssCGCksCGss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	8
Similarity score:	0.0961855

Alignment:

```
BBCGSRGCGVV
---GGGGMGGG
```

Original motif Consensus sequence: VVCGCKSCGBB



Reverse complement motif Consensus sequence: BBCGSRGCGVV

Dataset #: 2 Motif ID: 24 Motif name: Motif 24

Original motif Consensus sequence: CTGGGA

Reverse complement motif Consensus sequence: TCCCAG

Best Matches for Motif ID 24 (Highest to Lowest)

Dataset #:	1
Motif ID:	9
Motif name:	Motif 9
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	6
Similarity score:	0

Alignment:
GCTGGGAW
-CTGGGA-

Original motif Consensus sequence: GCTGGGAW

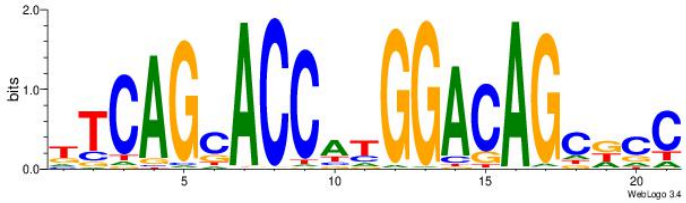
Reverse complement motif Consensus sequence: WTCCCAGC

Dataset #:	3
Motif ID:	35
Motif name:	REST
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement

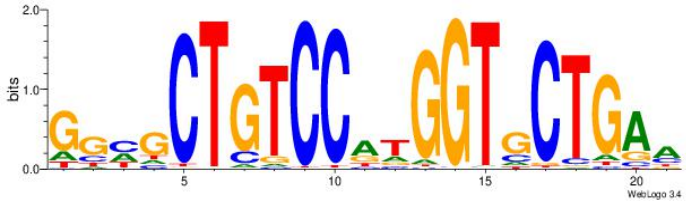
Direction:	Backward
Position number:	9
Number of overlap:	6
Similarity score:	0.0575099

Alignment:
GGYGCTGTCCATGGTGCTGAA
-------TCCCAG--------

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC



Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA

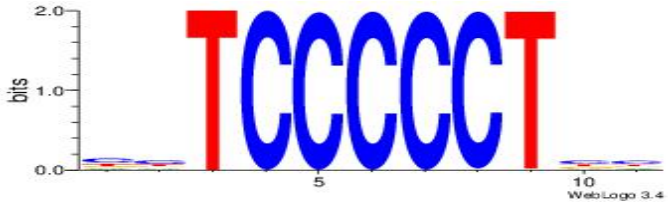


Dataset #:	4
Motif ID:	93
Motif name:	rrAGGGGGArr
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	6
Similarity score:	0.0578035

Alignment:
VVTCCCCCTVV
--TCCCAG---

Original motif Consensus sequence: VVAGGGGGAVV

Reverse complement motif Consensus sequence: VVTCCCCCTVV



Dataset #:	3
Motif ID:	39
Motif name:	MZF1_1-4
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	6
Similarity score:	0.0598868

Alignment:

```
TCCCCV
TCCCAG
```

Original motif Consensus sequence: BGGGGA

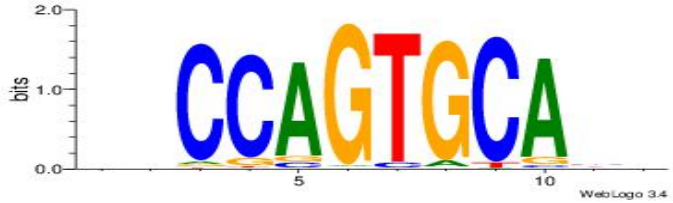
Reverse complement motif Consensus sequence: TCCCCV

Dataset #:	4
Motif ID:	103
Motif name:	ccCCAGTGCAbr
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:	0.0660266

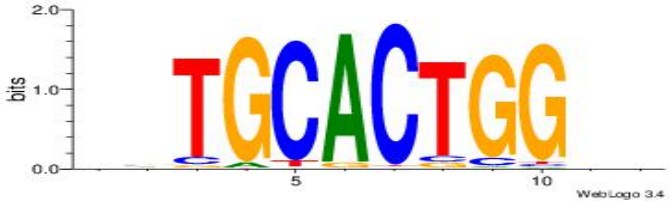
Alignment:

```
HVCCAGTGCABD
TCCCAG------
```

Original motif Consensus sequence: HVCCAGTGCABD



Reverse complement motif Consensus sequence: DBTGCACTGGVD

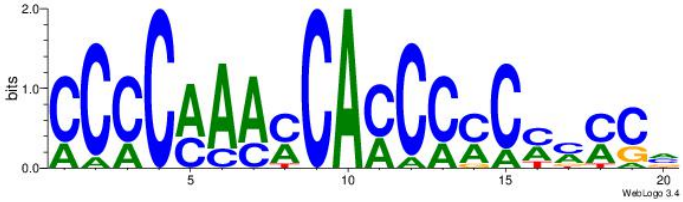


Dataset #:	3
Motif ID:	34
Motif name:	RREB1
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	6

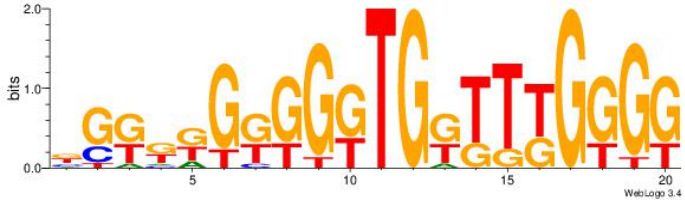
Similarity score: 0.0691671

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

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG

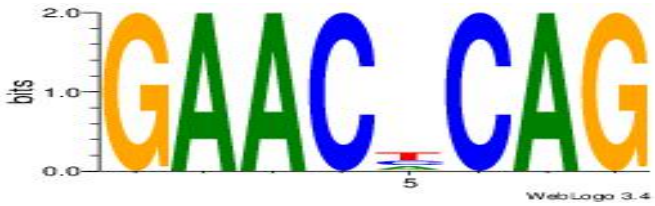


Dataset #: 1
Motif ID: 16
Motif name: Motif 16
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 3
Number of overlap: 6
Similarity score: 0.0726527

Alignment:
CTGDGTTC
CTGGGA--

Original motif Consensus sequence: CTGDGTTC

Reverse complement motif Consensus sequence: GAACDCAG



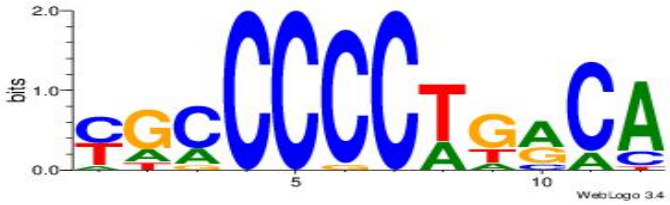
Dataset #:	3
Motif ID:	51
Motif name:	INSM1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	6
Similarity score:	0.0740406

Alignment:

```
TGYCAGGGGGCR
---CTGGGA---
```

Original motif Consensus sequence: TGYCAGGGGGCR

Reverse complement motif Consensus sequence: MGCCCCCTGMCA



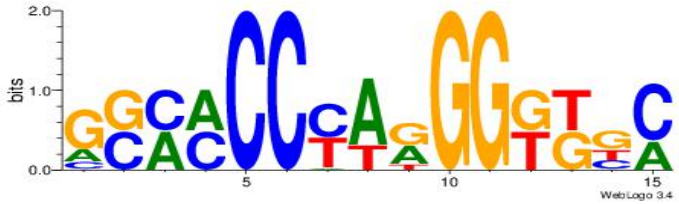
Dataset #:	3
Motif ID:	29

Motif name:	Zfp423
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	6
Similarity score:	0.0806694

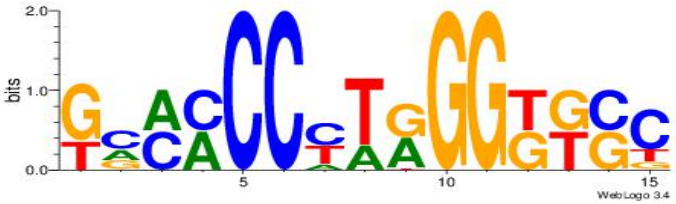
Alignment:

```
GYRYCCMTKGGYRSC
---TCCCAG------
```

Original motif Consensus sequence: GSMMCCYARGGKKKC



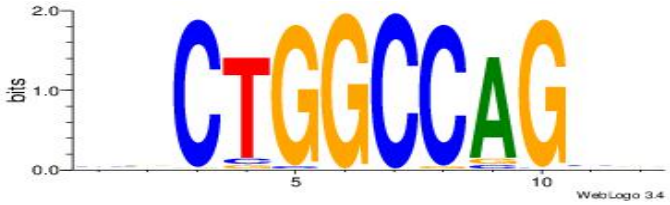
Reverse complement motif Consensus sequence: GYRYCCMTKGGYR



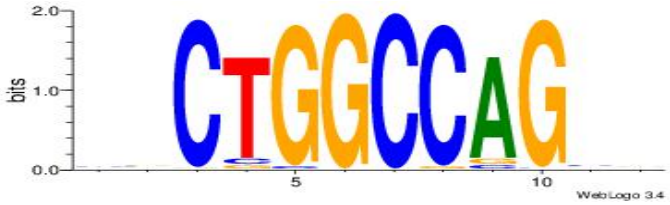
Dataset #:	4
Motif ID:	99
Motif name:	sgCTGGCCAGcs
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	6
Similarity score:	0.0827238

Alignment:
VVCTGGCCAGBB
----TCCCAG--

Original motif Consensus sequence: BBCTGGCCAGVV



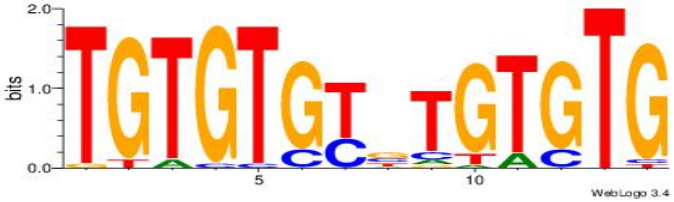
Reverse complement motif Consensus sequence: VVCTGGCCAGBB



Dataset #: 2 Motif ID: 25 Motif name: Motif 25

Original motif Consensus sequence: CACACAVRCACACA

Reverse complement motif Consensus sequence: TGTGTGKVTGTGT



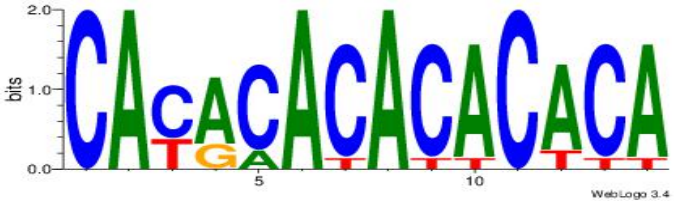
Best Matches for Motif ID 25 (Highest to Lowest)

Dataset #:	2
Motif ID:	27
Motif name:	Motif 27
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1

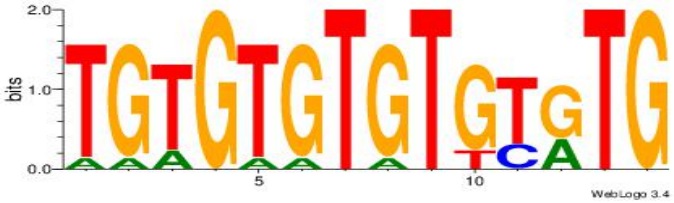
Number of overlap: 14
Similarity score: 0.0190992

Alignment:
CAYACACACACACA
CACACAVRCACACA

Original motif Consensus sequence: CAYACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTKT

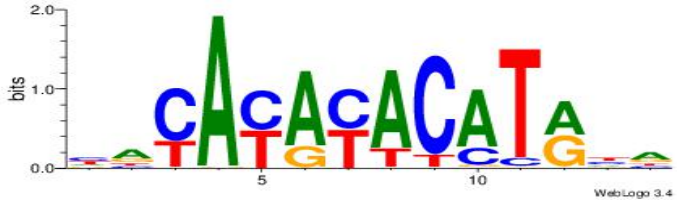


Dataset #: 4
Motif ID: 75
Motif name: yayAyAyACATrya
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 1
Number of overlap: 14
Similarity score: 0.0790984

Alignment:
HACAYAYACATRHD
CACACAVRCACACA

Original motif Consensus sequence: HACAYAYACATRHD

Reverse complement motif Consensus sequence: DHKATGTKTKTGT

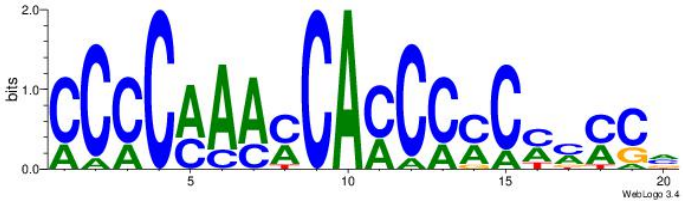


Dataset #:	3
Motif ID:	34
Motif name:	RREB1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	14
Similarity score:	0.0889603

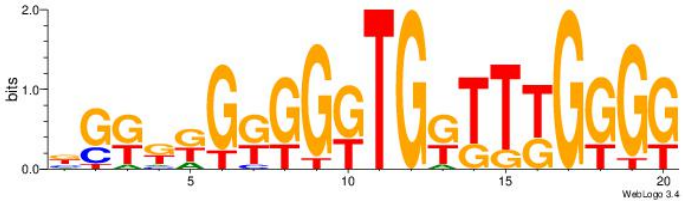
Alignment:

```
CCCCMAAMCAMCCMCMMMCV
----CACACAVRCACACA--
```

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG



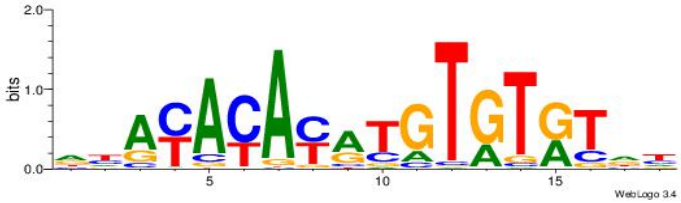
Dataset #:	4

Motif ID:	97
Motif name:	ryayAyAyrtGTRTrTry
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	14
Similarity score:	0.0894862

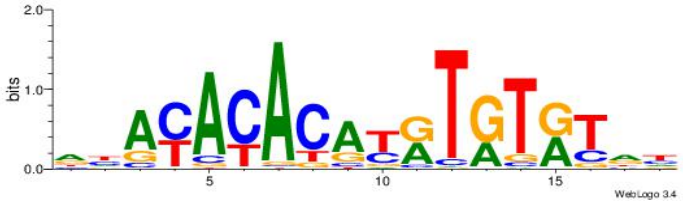
Alignment:

```
DHAYAYAYRTGTGTRTDH
-TGTGTGKVTGTGTG---
```

Original motif Consensus sequence: DHAYAYAYRTGTGTRTDH



Reverse complement motif Consensus sequence: HDAMACACAKKTKTKTHD



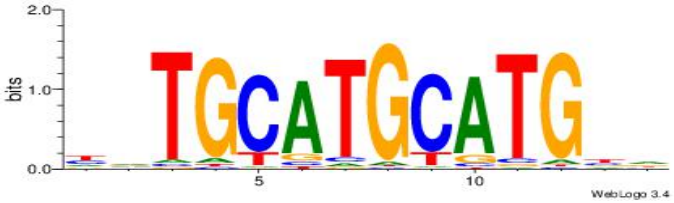
Dataset #:	4
Motif ID:	101
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14

Similarity score: 0.0983454

Alignment:
HVCATGCATGCABD
CACACAVRCACACA

Original motif Consensus sequence: HVCATGCATGCABD

Reverse complement motif Consensus sequence: DVTGCATGCATGB

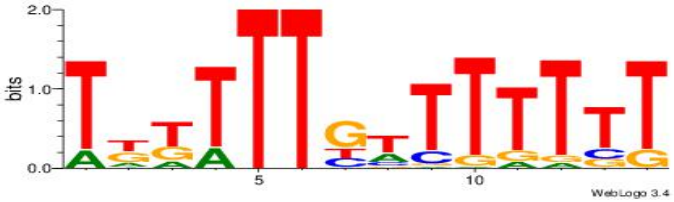


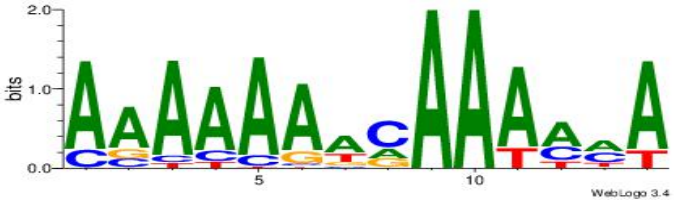
Dataset #: 2
Motif ID: 26
Motif name: Motif 26
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 2
Number of overlap: 13
Similarity score: 0.581031

Alignment:
TKKTTTGTTTTTTT-
-TGTGTGKVTGTGTG

Original motif Consensus sequence: TKKTTTGTTTTTTT

Reverse complement motif Consensus sequence: AAAAAAACAAARR





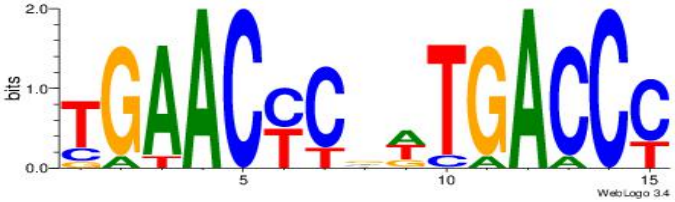
Dataset #:	3
Motif ID:	33
Motif name:	RXRAVDR
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	13
Similarity score:	0.596059

Alignment:

```
-GGGTCAWBGRGTTCA
TGTGTGKVTGTGTG--
```

Original motif Consensus sequence: GGGTCAWBGRGTTCA

Reverse complement motif Consensus sequence: TGAACKCBWTGAC



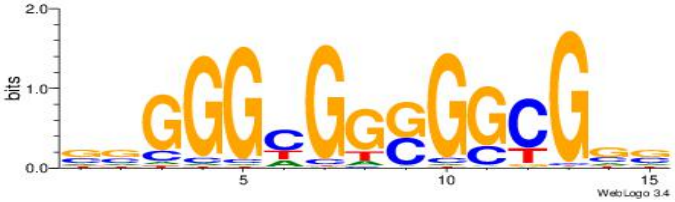
Dataset #:	4
Motif ID:	91

Motif name:	ssCGCCsCCrCCCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	13
Similarity score:	0.600159

Alignment:
SSCGCCSCCGCCCSS-
--CACACAVRCACACA

Original motif Consensus sequence: SSCGCCSCCGCCCSS

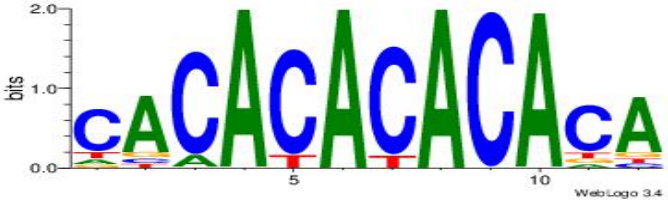
Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS



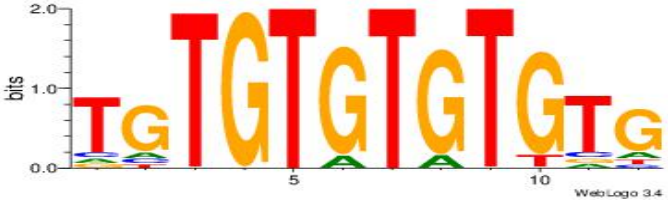
Dataset #:	4
Motif ID:	79
Motif name:	CACACACACACA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	1.01986

Alignment:
TGTGTGTGTGTG--
TGTGTGKVTGTGTG

Original motif Consensus sequence: CACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTG

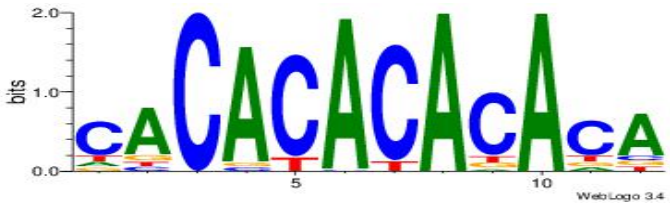


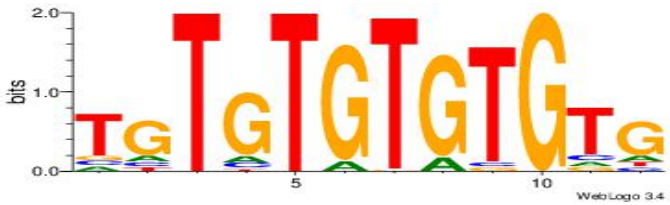
Dataset #:	4
Motif ID:	95
Motif name:	CACACACACACA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	1.02642

Alignment:
TGTGTGTGTGTG--
TGTGTGKVTGTGTG

Original motif Consensus sequence: CACACACACACA

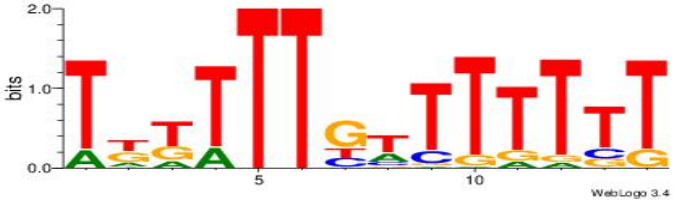
Reverse complement motif Consensus sequence: TGTGTGTGTGTG



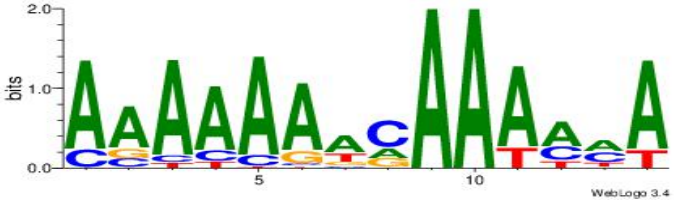


Dataset #: 2 Motif ID: 26 Motif name: Motif 26

Original motif Consensus sequence: TKKTTTGTTTTTTT



Reverse complement motif Consensus sequence: AAAAAAACAAARR



Best Matches for Motif ID 26 (Highest to Lowest)

Dataset #:	4
Motif ID:	75
Motif name:	yayAyAyACATrya
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0683766

Alignment:

```
DHKATGTKTKTGTD
TKKTTTGTTTTTTT
```

Original motif Consensus sequence: HACAYAYACATRHD

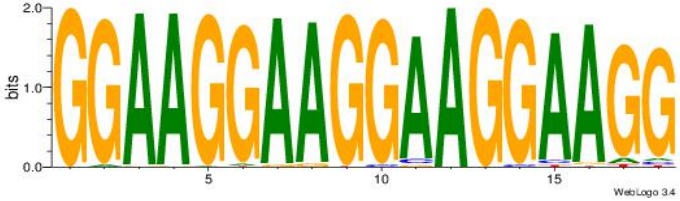
Reverse complement motif Consensus sequence: DHKATGTKTKTGT

Dataset #:	3
Motif ID:	48
Motif name:	EWSR1-FLI1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	14
Similarity score:	0.0745773

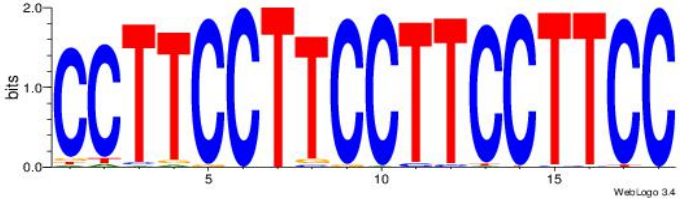
Alignment:

```
GGAAGGAAGGAAGGAAGG
--AAAAAAACAAARRA--
```

Original motif Consensus sequence: GGAAGGAAGGAAGGAAGG



Reverse complement motif Consensus sequence: CCTTCCTTCCTTCCTTCC



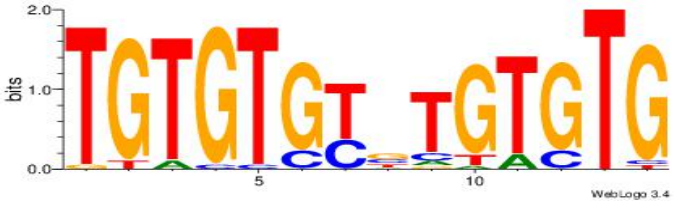
Dataset #:	2
Motif ID:	25
Motif name:	Motif 25
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	13
Similarity score:	0.561185

Alignment:

```
-CACACAVRCACACA
AAAAAAACAAARRA-
```

Original motif Consensus sequence: CACACAVRCACACA

Reverse complement motif Consensus sequence: TGTGTGKVTGTGT

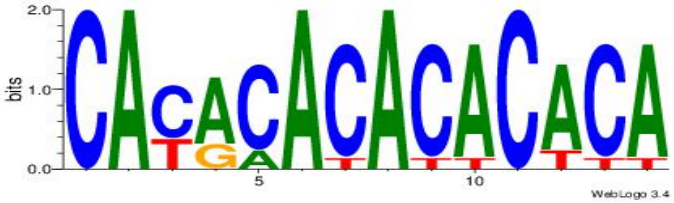


Dataset #:	2
Motif ID:	27
Motif name:	Motif 27
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	13

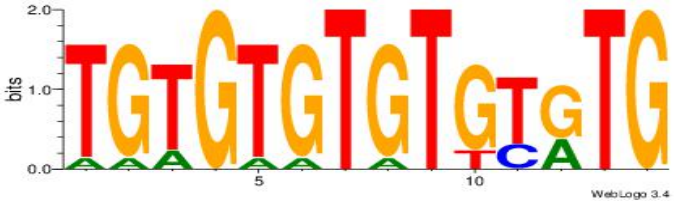
Similarity score: 0.563745

Alignment:
-TGTGTGTGTGTKTG
TKKTTTGTTTTTTT-

Original motif Consensus sequence: CAYACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTKT

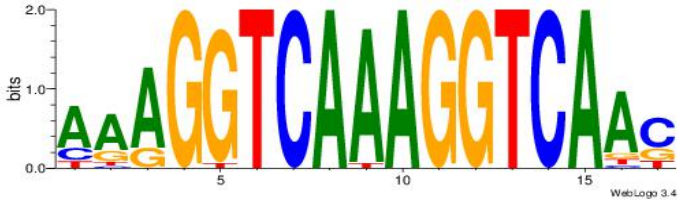


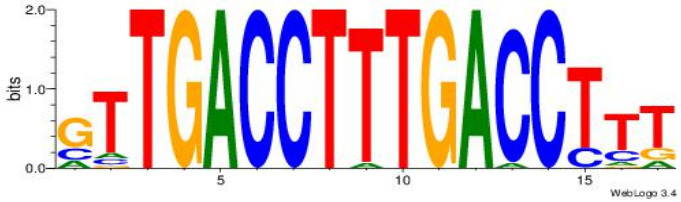
Dataset #: 3
Motif ID: 59
Motif name: NR1H2RXRA
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 5
Number of overlap: 13
Similarity score: 0.567794

Alignment:
-AAAGGTCAAAGGTCAAC
AAAAAAACAAARRA----

Original motif Consensus sequence: AAAGGTCAAAGGTCAAC

Reverse complement motif Consensus sequence: GTTGACCTTTGACCTTT



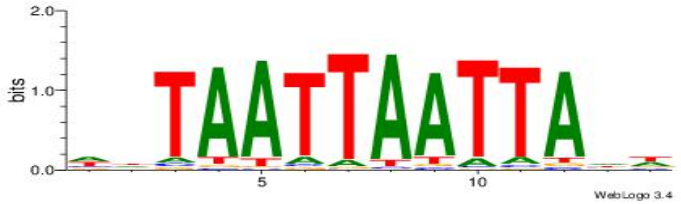


Dataset #:	4
Motif ID:	98
Motif name:	wwTAATTAATTAww
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	13
Similarity score:	0.570142

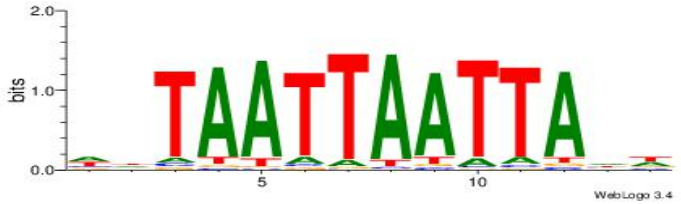
Alignment:

```
-DHTAATTAATTADH
AAAAAAACAAARRA-
```

Original motif Consensus sequence: HDTAATTAATTAHD



Reverse complement motif Consensus sequence: DHTAATTAATTADH



Dataset #:	3
Motif ID:	36

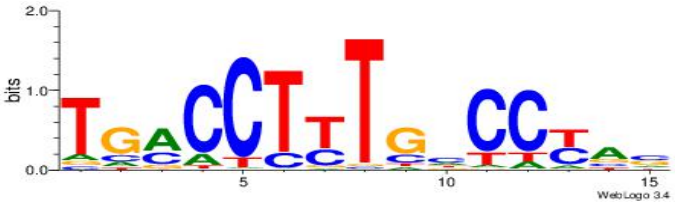
Motif name:	PPARGRXRA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	13
Similarity score:	0.575193

Alignment:

```
-BTRGGDCARAGGKCA
AAAAAAACAAARRA--
```

Original motif Consensus sequence: BTRGGDCARAGGKCA

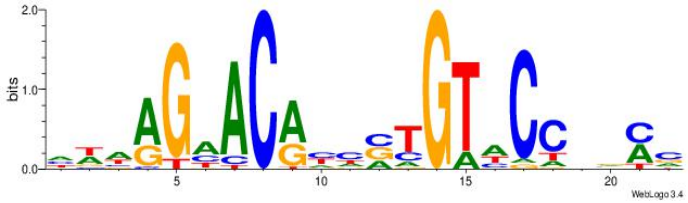
Reverse complement motif Consensus sequence: TGRCCTKTGHCCK



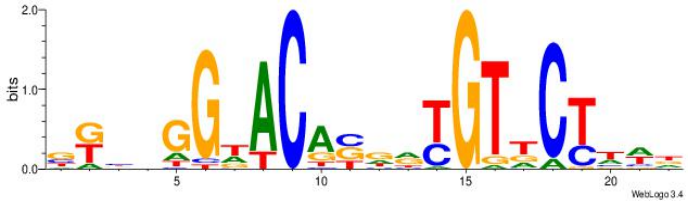
Dataset #:	3
Motif ID:	40
Motif name:	Ar
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	10
Number of overlap:	13
Similarity score:	0.576204

Alignment:
VRVDGGHACAVDDKGTHCTDWH-
---------TKKTTTGTTTTTTT

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH

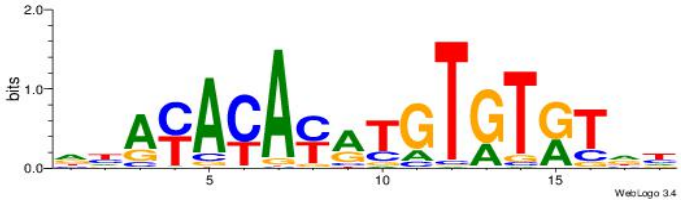


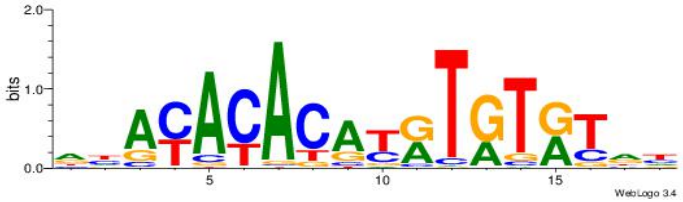
Dataset #:	4
Motif ID:	97
Motif name:	ryayAyAyrtGTRTrTry
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	12
Similarity score:	1.06681

Alignment:
--HDAMACACAKKTKTKTHD
AAAAAAACAAARRA------

Original motif Consensus sequence: DHAYAYAYRTGTGTRTDH

Reverse complement motif Consensus sequence: HDAMACACAKKTKTKTHD



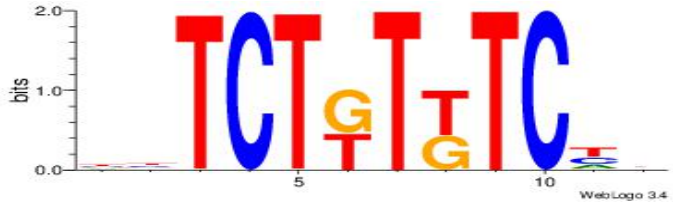


Dataset #:	4
Motif ID:	92
Motif name:	tyTCTkTkTCyy
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	1.07221

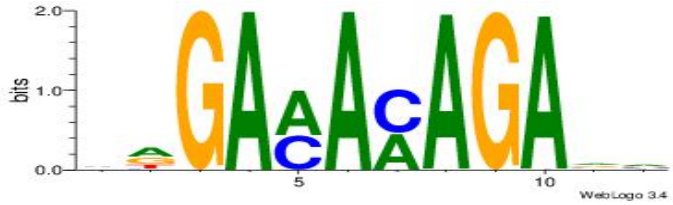
Alignment:

```
--BBTCTKTKTCHB
TKKTTTGTTTTTTT
```

Original motif Consensus sequence: BBTCTKTKTCHB

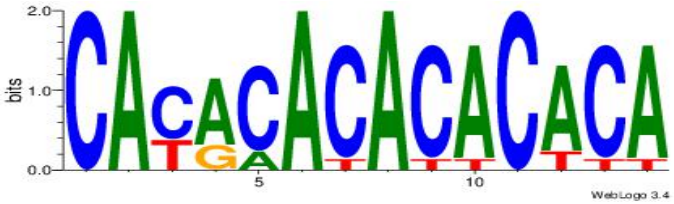


Reverse complement motif Consensus sequence: VHGARAYAGAVV

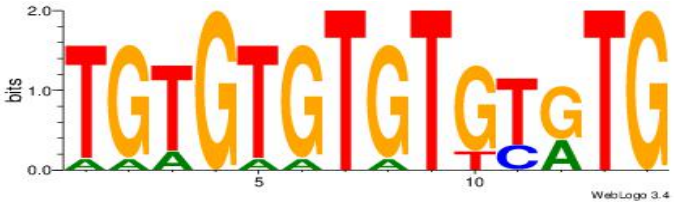


Dataset #: 2 Motif ID: 27 Motif name: Motif 27

Original motif Consensus sequence: CAYACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTKT



Best Matches for Motif ID 27 (Highest to Lowest)

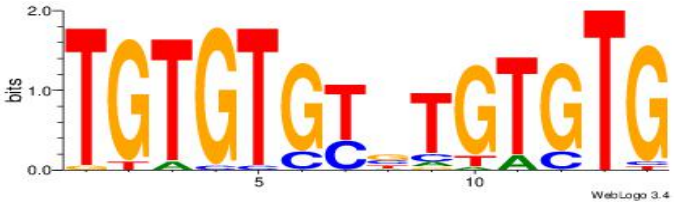
Dataset #:	2
Motif ID:	25
Motif name:	Motif 25
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0198904

Alignment:

```
CACACAVRCACACA
CAYACACACACACA
```

Original motif Consensus sequence: CACACAVRCACACA

Reverse complement motif Consensus sequence: TGTGTGKVTGTGT



Dataset #:	4
Motif ID:	75
Motif name:	yayAyAyACATrya
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:	0.0728259

Alignment:

HACAYAYACATRHD

CAYACACACACACA

Original motif Consensus sequence: HACAYAYACATRHD

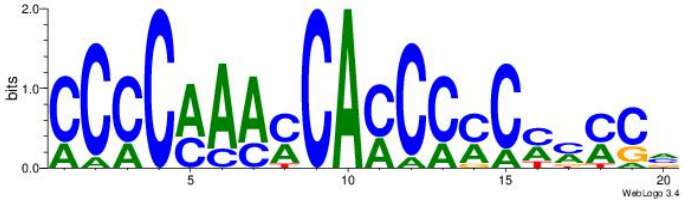
Reverse complement motif Consensus sequence: DHKATGTKTKTGT

Dataset #:	3
Motif ID:	34
Motif name:	RREB1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	14

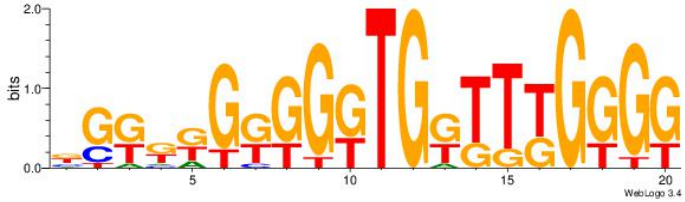
Similarity score: 0.0866168

Alignment:
CCCCMAAMCAMCCMCMMMCV
----CAYACACACACACA--

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG

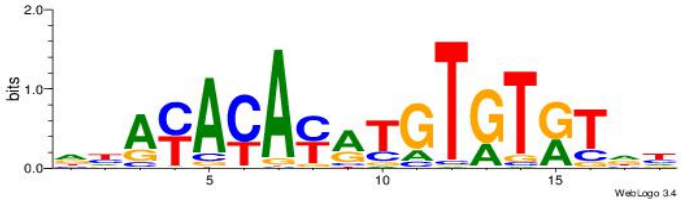


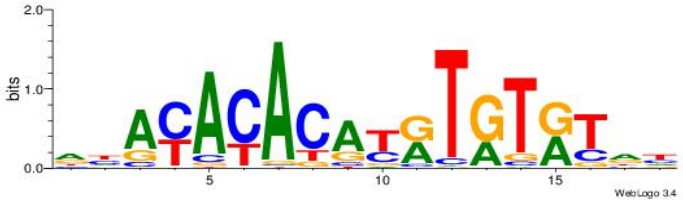
Dataset #: 4
Motif ID: 97
Motif name: ryayAyAyrtGTRTrTry
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 2
Number of overlap: 14
Similarity score: 0.0949484

Alignment:
DHAYAYAYRTGTGTRTDH
---TGTGTGTGTGTKTG-

Original motif Consensus sequence: DHAYAYAYRTGTGTRTDH

Reverse complement motif Consensus sequence: HDAMACACAKKTKTKTHD



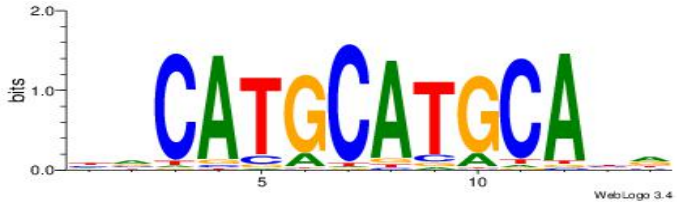


Dataset #:	4
Motif ID:	101
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0966618

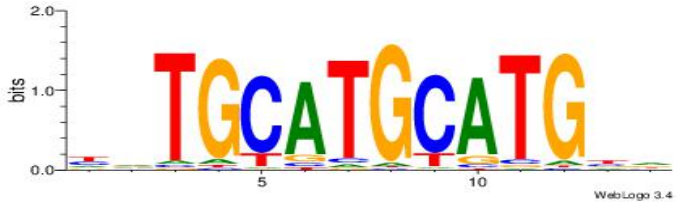
Alignment:

```
HVCATGCATGCABD
CAYACACACACACA
```

Original motif Consensus sequence: HVCATGCATGCABD



Reverse complement motif Consensus sequence: DVTGCATGCATGB



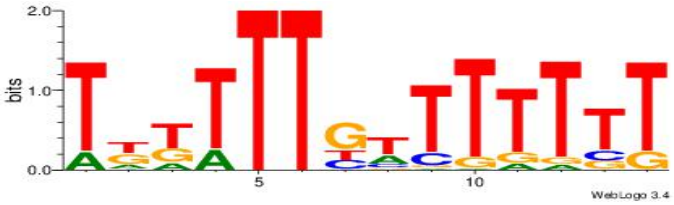
Dataset #:	2
Motif ID:	26

Motif name:	Motif 26
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	13
Similarity score:	0.584382

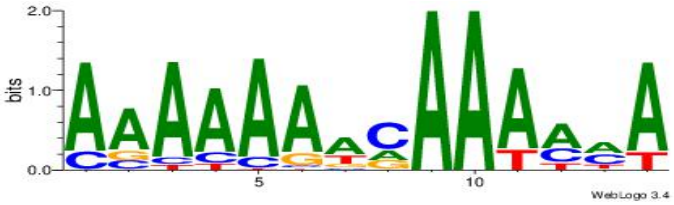
Alignment:

```
AAAAAAACAAARRA-
-CAYACACACACACA
```

Original motif Consensus sequence: TKKTTTGTTTTTTT



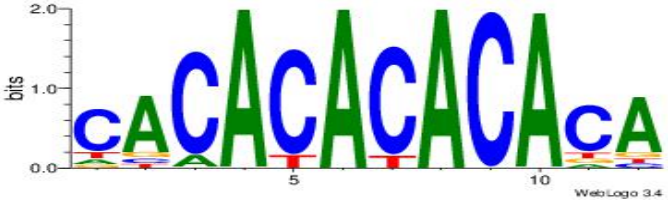
Reverse complement motif Consensus sequence: AAAAAAACAAARR



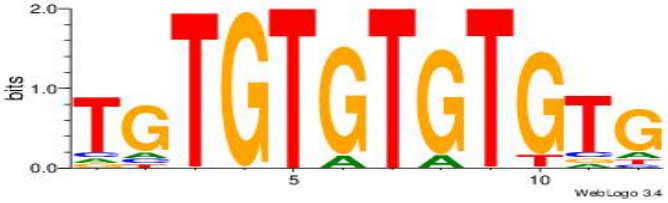
Dataset #:	4
Motif ID:	79
Motif name:	CACACACACACA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	1

Alignment:
TGTGTGTGTGTG--
TGTGTGTGTGTKTG

Original motif Consensus sequence: CACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTG

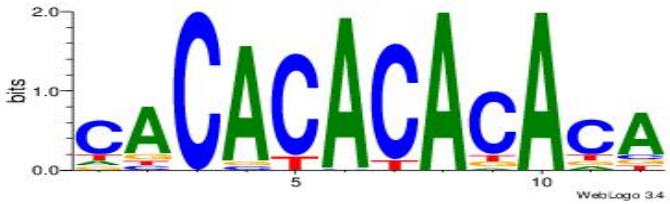


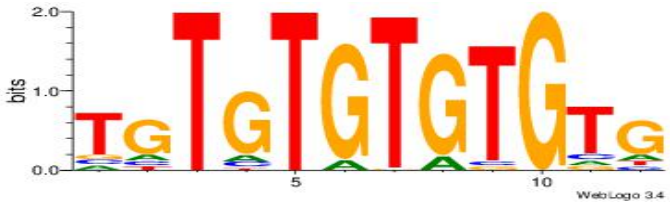
Dataset #:	4
Motif ID:	95
Motif name:	CACACACACACA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	1.00916

Alignment:
TGTGTGTGTGTG--
TGTGTGTGTGTKTG

Original motif Consensus sequence: CACACACACACA

Reverse complement motif Consensus sequence: TGTGTGTGTGTG



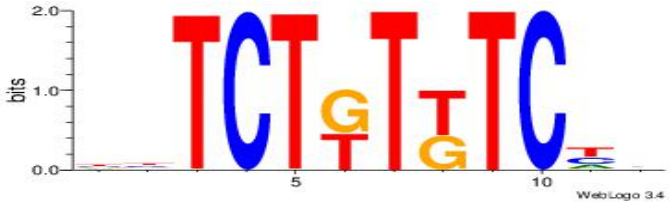


Dataset #:	4
Motif ID:	92
Motif name:	tyTCTkTkTCyy
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	1.08698

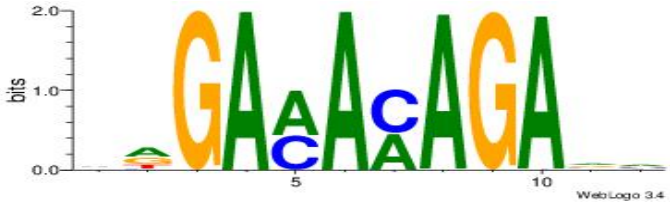
Alignment:

```
BBTCTKTKTCHB--
TGTGTGTGTGTKTG
```

Original motif Consensus sequence: BBTCTKTKTCHB



Reverse complement motif Consensus sequence: VHGARAYAGAVV



Dataset #:	3
Motif ID:	51

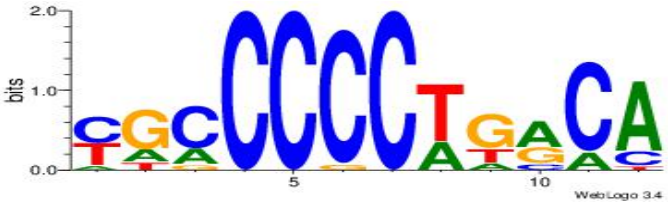
Motif name:	INSM1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	1.09649

Alignment:

```
--TGYCAGGGGGCR
TGTGTGTGTGTKTG
```

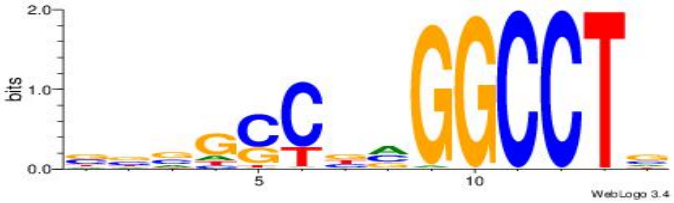
Original motif Consensus sequence: TGYCAGGGGGCR

Reverse complement motif Consensus sequence: MGCCCCCTGMCA

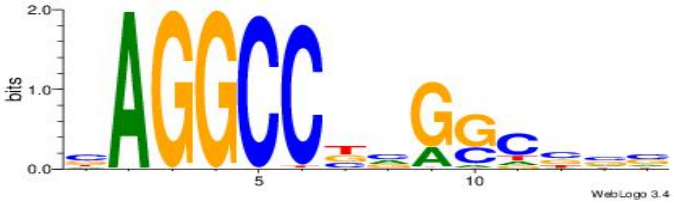


Dataset #: 3 Motif ID: 28 Motif name: Zfx

Original motif Consensus sequence: BBVGCCBVGGCCTV



Reverse complement motif Consensus sequence: VAGGCCBBGGCVB



Best Matches for Motif ID 28 (Highest to Lowest)

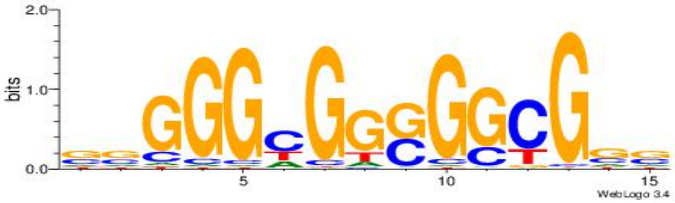
Dataset #:	4
Motif ID:	91
Motif name:	ssCGCCsCCrCCCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0478501

Alignment:

```
SSCGCCSCCGCCCSS
BBVGCCBVGGCCTV-
```

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS

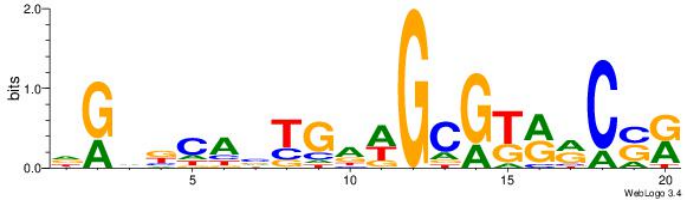


Dataset #:	3
Motif ID:	61
Motif name:	Pax5
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5

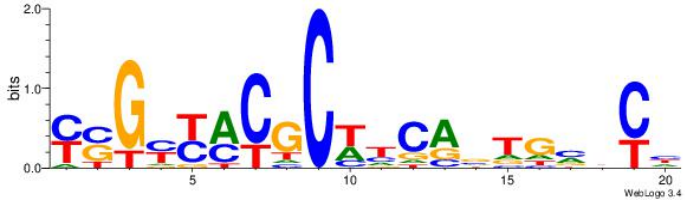
Number of overlap: 14
Similarity score: 0.0611182

Alignment:
DGVBCABTGDWGCGKRRCSR
--BBVGCCBVGGCCTV----

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR



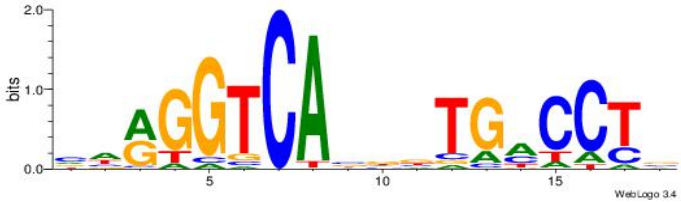
Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD



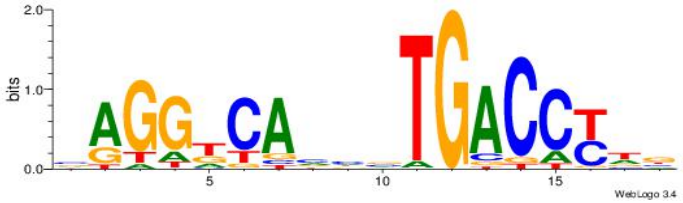
Dataset #: 3
Motif ID: 46
Motif name: ESR2
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 2
Number of overlap: 14
Similarity score: 0.0635714

Alignment:
BAGGYCABHBTGACCKHV
---BBVGCCBVGGCCTV-

Original motif Consensus sequence: VHRGGTCABDBTGMCCTB



Reverse complement motif Consensus sequence: BAGGYCABHBTGACCKHV

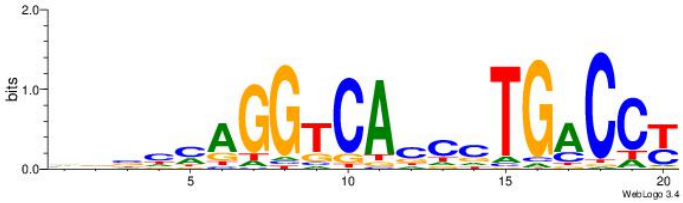


Dataset #:	3
Motif ID:	45
Motif name:	ESR1
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	14
Similarity score:	0.0722733

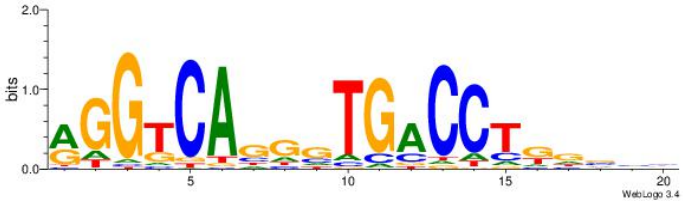
Alignment:

```
MGGTCAGGGTGACCTRDBHV
--BBVGCCBVGGCCTV----
```

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY



Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV

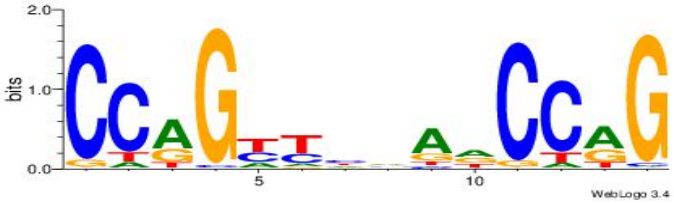


Dataset #:	3
Motif ID:	64
Motif name:	Tcfcp2l1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0732898

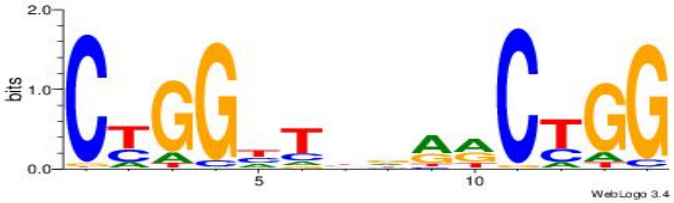
Alignment:

```
CCAGYYHVADCCRG
BBVGCCBVGGCCTV
```

Original motif Consensus sequence: CCAGYYHVADCCRG



Reverse complement motif Consensus sequence: CKGGDTBDMMCT

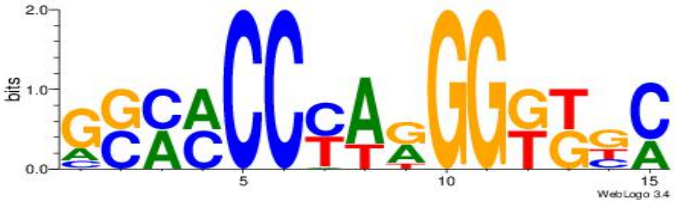


Dataset #:	3
Motif ID:	29
Motif name:	Zfp423
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	14

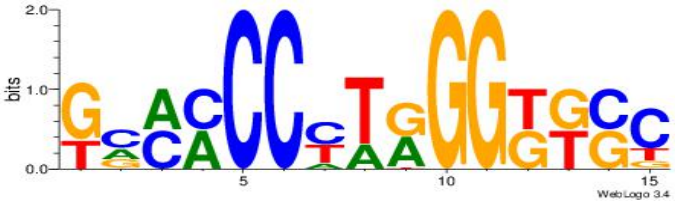
Similarity score: 0.0747812

Alignment:
GYRYCCMTKGGYRSC
-VAGGCCBBGGCVBB

Original motif Consensus sequence: GSMMCCYARGGKKKC



Reverse complement motif Consensus sequence: GYRYCCMTKGGYR

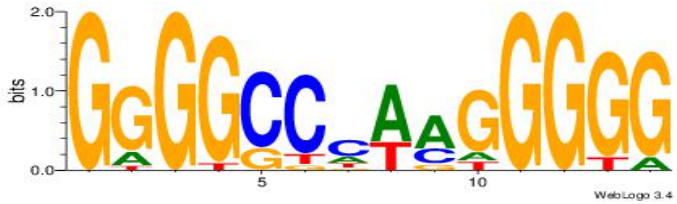


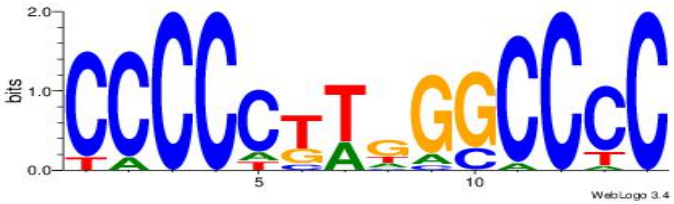
Dataset #: 3
Motif ID: 37
Motif name: PLAG1
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 1
Number of overlap: 14
Similarity score: 0.0796879

Alignment:
CCCCCTTGGGCCCC
BBVGCCBVGGCCTV

Original motif Consensus sequence: GGGGCCCAAGGGGG

Reverse complement motif Consensus sequence: CCCCCTTGGGCCC



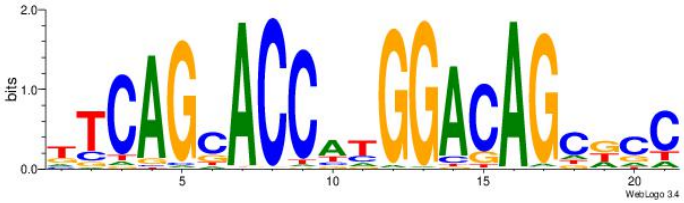


Dataset #:	3
Motif ID:	35
Motif name:	REST
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	14
Similarity score:	0.0812253

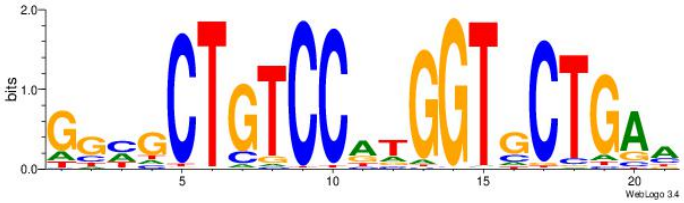
Alignment:

```
GGYGCTGTCCATGGTGCTGAA
----VAGGCCBBGGCVBB---
```

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC



Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA



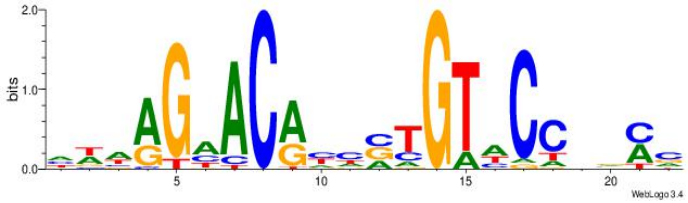
Dataset #:	3

Motif ID:	40
Motif name:	Ar
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	14
Similarity score:	0.0832838

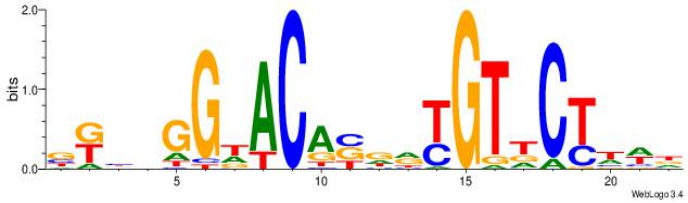
Alignment:

```
HWDAGHACRHHVTGTHCCHVMV
-----VAGGCCBBGGCVBB---
```

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH



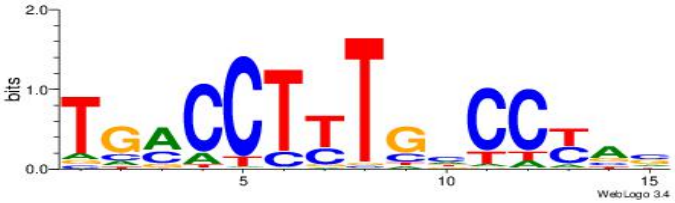
Dataset #:	3
Motif ID:	36
Motif name:	PPARGRXRA
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	14

Similarity score: 0.0836605

Alignment:
TGRCCTKTGHCCKAB
BBVGCCBVGGCCTV-

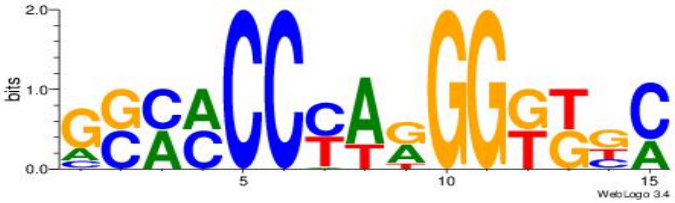
Original motif Consensus sequence: BTRGGDCARAGGKCA

Reverse complement motif Consensus sequence: TGRCCTKTGHCCK

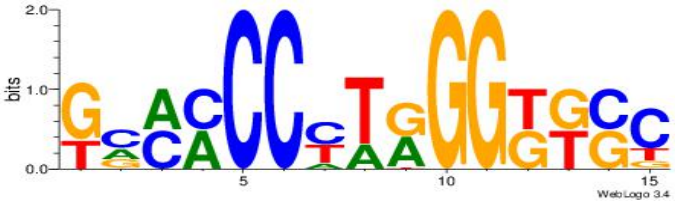


Dataset #: 3 Motif ID: 29 Motif name: Zfp423

Original motif Consensus sequence: GSMMCCYARGGKKKC



Reverse complement motif Consensus sequence: GYRYCCMTKGGYR



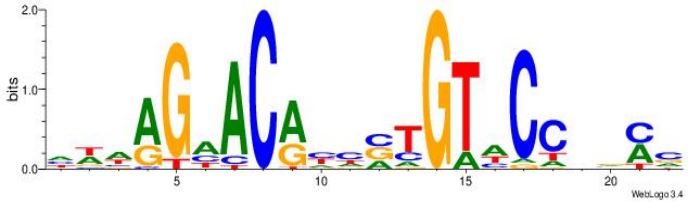
Best Matches for Motif ID 29 (Highest to Lowest)

Dataset #:	3
Motif ID:	40
Motif name:	Ar
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward

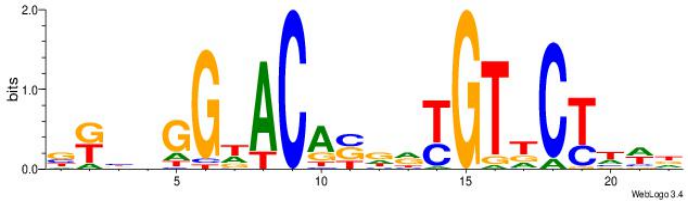
Position number:	5
Number of overlap:	15
Similarity score:	0.0465445

Alignment:
HWDAGHACRHHVTGTHCCHVMV
---GSMMCCYARGGKKKC----

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



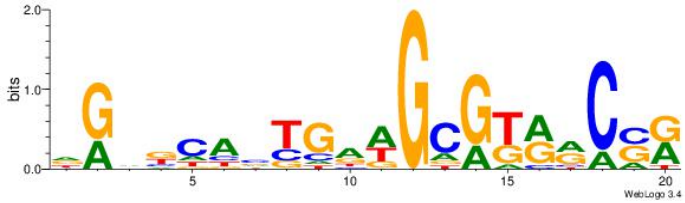
Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH



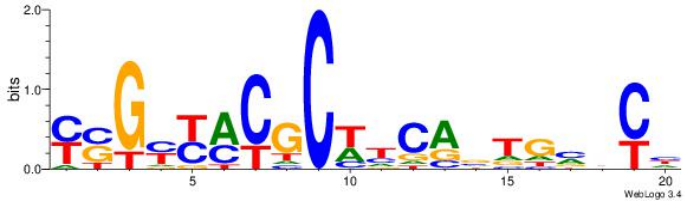
Dataset #:	3
Motif ID:	61
Motif name:	Pax5
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	15
Similarity score:	0.0466076

Alignment:
DGVBCABTGDWGCGKRRCSR
--GSMMCCYARGGKKKC---

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR



Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD

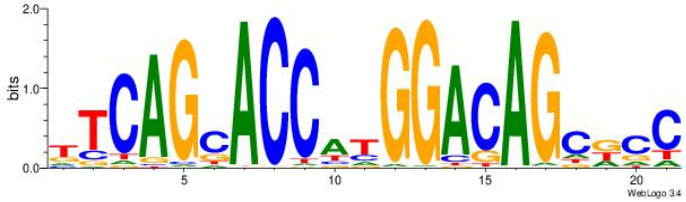


Dataset #:	3
Motif ID:	35
Motif name:	REST
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	15
Similarity score:	0.0475403

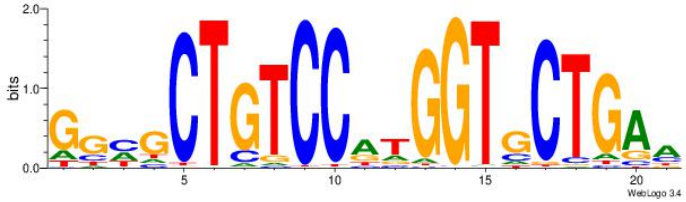
Alignment:

```
TTCAGCACCATGGACAGCKCC
---GYRYCCMTKGGYRSC---
```

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC



Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA

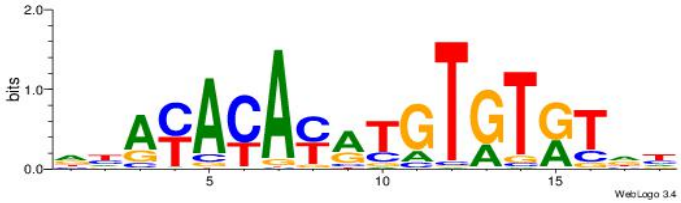


Dataset #:	4
Motif ID:	97
Motif name:	ryayAyAyrtGTRTrTry
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	15
Similarity score:	0.0497128

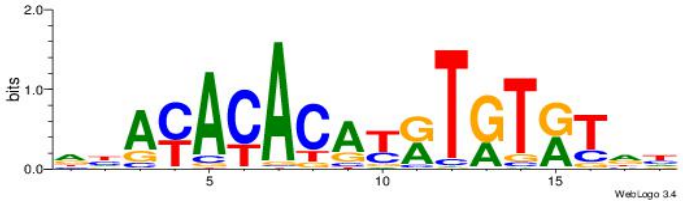
Alignment:

```
DHAYAYAYRTGTGTRTDH
--GYRYCCMTKGGYRSC-
```

Original motif Consensus sequence: DHAYAYAYRTGTGTRTDH



Reverse complement motif Consensus sequence: HDAMACACAKKTKTKTHD



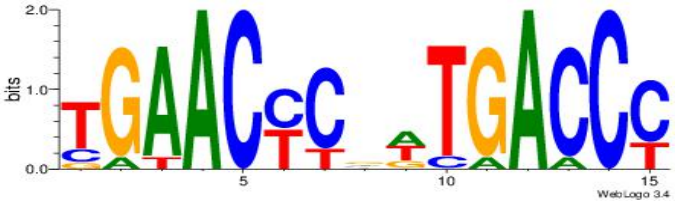
Dataset #:	3
Motif ID:	33
Motif name:	RXRAVDR
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1

Number of overlap: 15
Similarity score: 0.053047

Alignment:
GGGTCAWBGRGTTCA
GYRYCCMTKGGYRSC

Original motif Consensus sequence: GGGTCAWBGRGTTCA

Reverse complement motif Consensus sequence: TGAACKCBWTGAC

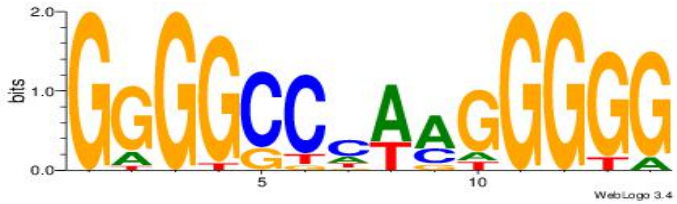


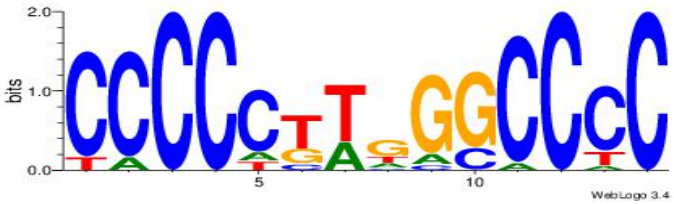
Dataset #: 3
Motif ID: 37
Motif name: PLAG1
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 14
Similarity score: 0.534468

Alignment:
GGGGCCCAAGGGGG-
GSMMCCYARGGKKKC

Original motif Consensus sequence: GGGGCCCAAGGGGG

Reverse complement motif Consensus sequence: CCCCCTTGGGCCC



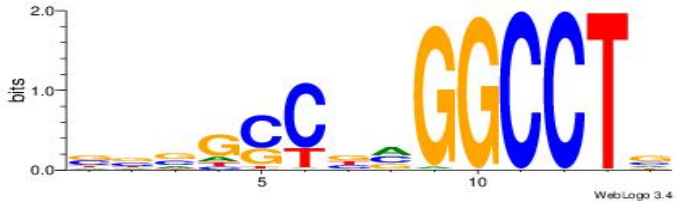


Dataset #:	3
Motif ID:	28
Motif name:	Zfx
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.54645

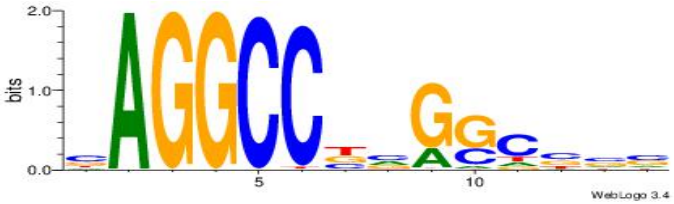
Alignment:

```
-VAGGCCBBGGCVBB
GYRYCCMTKGGYRSC
```

Original motif Consensus sequence: BBVGCCBVGGCCTV



Reverse complement motif Consensus sequence: VAGGCCBBGGCVB



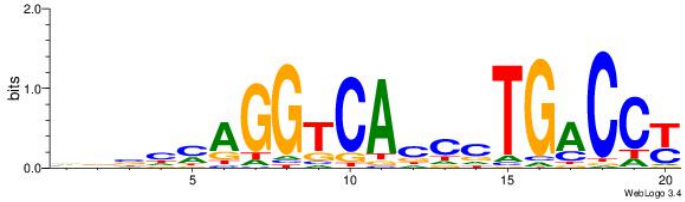
Dataset #:	3
Motif ID:	45

Motif name:	ESR1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	8
Number of overlap:	13
Similarity score:	1.03908

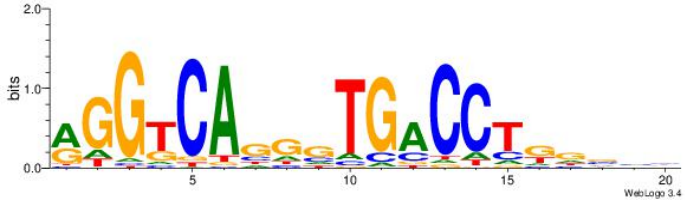
Alignment:

```
--VDBHMAGGTCACCCTGACCY
GYRYCCMTKGGYRSC-------
```

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY



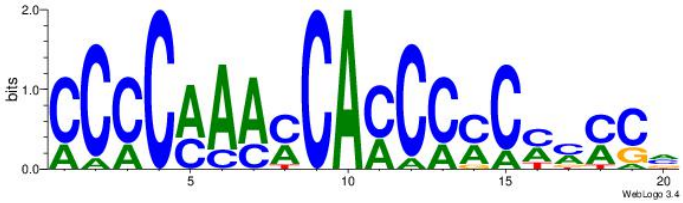
Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV



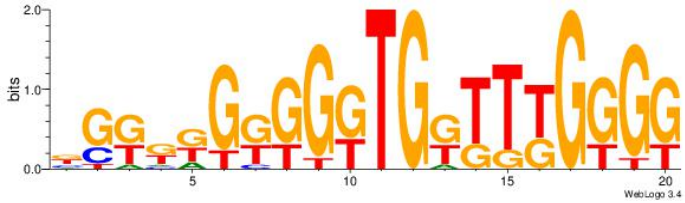
Dataset #:	3
Motif ID:	34
Motif name:	RREB1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	8
Number of overlap:	13
Similarity score:	1.05606

Alignment:
BGRRRGRGGRTGRTTYGGGG--
-------GYRYCCMTKGGYRSC

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG

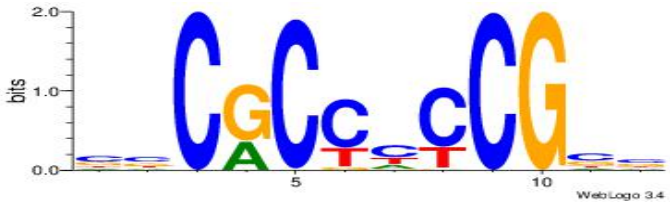


Dataset #:	4
Motif ID:	88
Motif name:	ssCrCYyYCGss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	1.54285

Alignment:
---BBCGGKGGMGBB
GYRYCCMTKGGYRSC

Original motif Consensus sequence: BBCRCCYCCGBB

Reverse complement motif Consensus sequence: BBCGGKGGMGBB



Dataset #: 3 **Motif ID: 30** **Motif name: ZEB1**

Original motif Consensus sequence: CACCTD

Reverse complement motif Consensus sequence: HAGGTG

Best Matches for Motif ID 30 (Highest to Lowest)

Dataset #:	3
Motif ID:	62
Motif name:	RORA_1
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	6
Similarity score:	0.0141289

Alignment:

```
TGACCTDVWT
-CACCTD---
```

Original motif Consensus sequence: AWVDAGGTCA

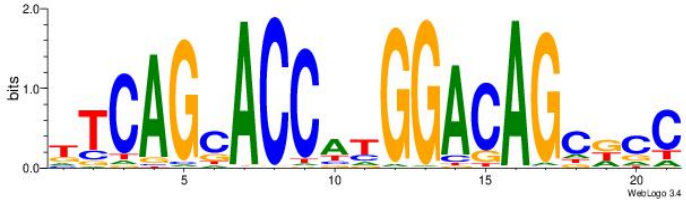
Reverse complement motif Consensus sequence: TGACCTDVWT

Dataset #:	3
Motif ID:	35
Motif name:	REST
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	6
Similarity score:	0.0143133

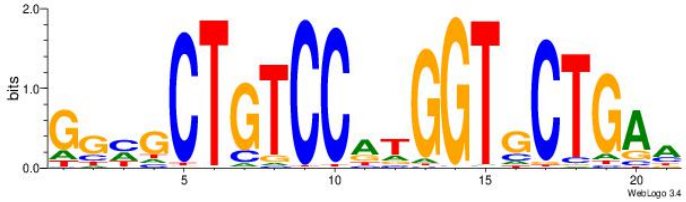
Alignment:

```
GGYGCTGTCCATGGTGCTGAA
----------HAGGTG-----
```

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC



Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA

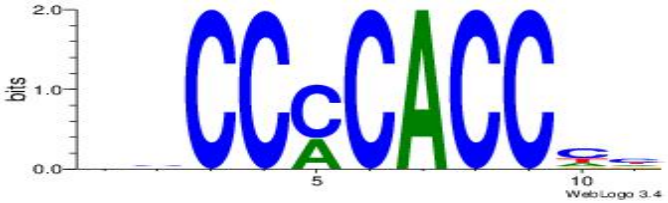


Dataset #:	4
Motif ID:	89
Motif name:	ccCCmCACCcc
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	6
Similarity score:	0.0148347

Alignment:

```
HBCCMCACCHH
-----CACCTD
```

Original motif Consensus sequence: HBCCMCACCHH



Reverse complement motif Consensus sequence: DDGGTGRGGBD

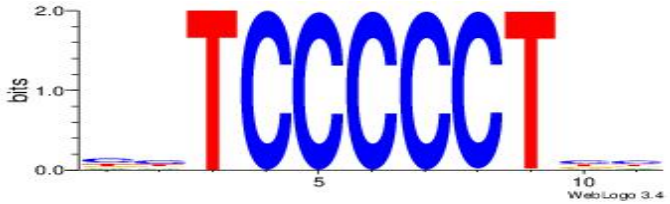
Dataset #:	4
Motif ID:	93
Motif name:	rrAGGGGGArr
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	6

Similarity score: 0.0194512

Alignment:
VVAGGGGGAVV
-HAGGTG----

Original motif Consensus sequence: VVAGGGGGAVV

Reverse complement motif Consensus sequence: VVTCCCCCTVV



Dataset #: 3
Motif ID: 47
Motif name: Esrrb
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 6
Similarity score: 0.0207244

Alignment:
CACGTG
HAGGTG

Original motif Consensus sequence: CACGTG

Reverse complement motif Consensus sequence: CACGTG

Dataset #:	3
Motif ID:	41
Motif name:	Arnt
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:	0.0207244

Alignment:

```
CACGTG
CACCTD
```

Original motif Consensus sequence: CACGTG

Reverse complement motif Consensus sequence: CACGTG

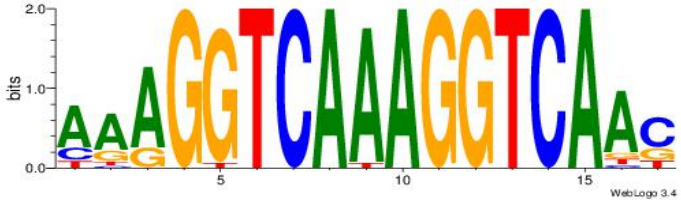
Dataset #:	3
Motif ID:	59

Motif name:	NR1H2RXRA
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	6
Similarity score:	0.0232753

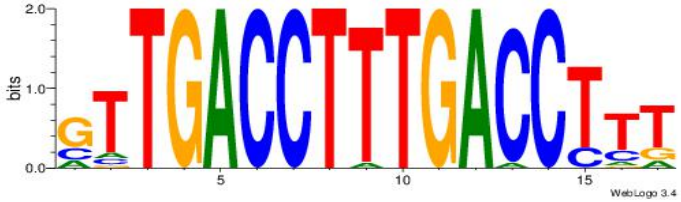
Alignment:

```
GTTGACCTTTGACCTTT
----------CACCTD-
```

Original motif Consensus sequence: AAAGGTCAAAGGTCAAC



Reverse complement motif Consensus sequence: GTTGACCTTTGACCTTT



Dataset #:	3
Motif ID:	49
Motif name:	HIF1AARNT
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	6
Similarity score:	0.0237889

Alignment:
VBACGTGV
-HAGGTG-

Original motif Consensus sequence: VBACGTGV

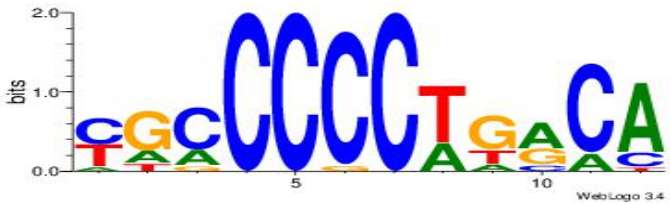
Reverse complement motif Consensus sequence: VCACGTBV

Dataset #:	3
Motif ID:	51
Motif name:	INSM1
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:	0.0262123

Alignment:
TGYCAGGGGGCR
---HAGGTG---

Original motif Consensus sequence: TGYCAGGGGGCR

Reverse complement motif Consensus sequence: MGCCCCCTGMCA



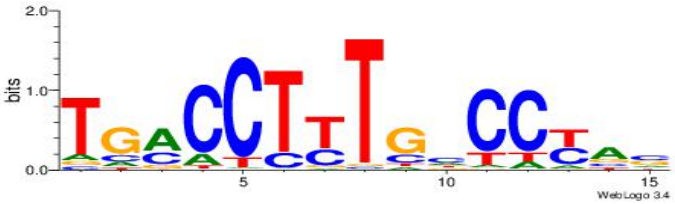
Dataset #:	3
Motif ID:	36
Motif name:	PPARGRXRA
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	9
Number of overlap:	6
Similarity score:	0.0264837

Alignment:

```
TGRCCTKTGHCCKAB
-CACCTD--------
```

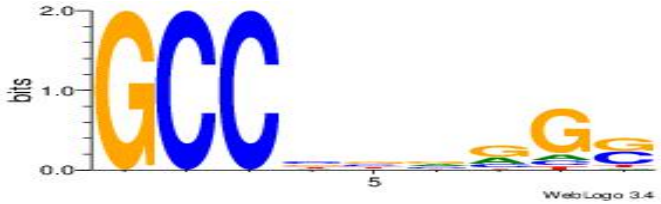
Original motif Consensus sequence: BTRGGDCARAGGKCA

Reverse complement motif Consensus sequence: TGRCCTKTGHCCK

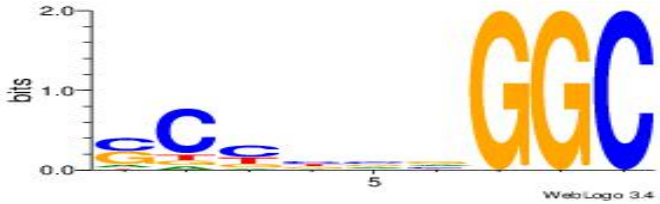


Dataset #: 3 Motif ID: 31 Motif name: TFAP2A

Original motif Consensus sequence: GCCBBVRGS



Reverse complement motif Consensus sequence: SCMVBBGGC



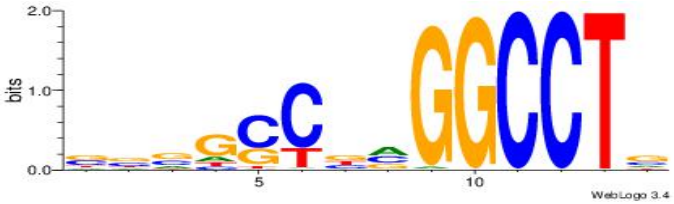
Best Matches for Motif ID 31 (Highest to Lowest)

Dataset #:	3
Motif ID:	28
Motif name:	Zfx
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	9
Similarity score:	0.0355616

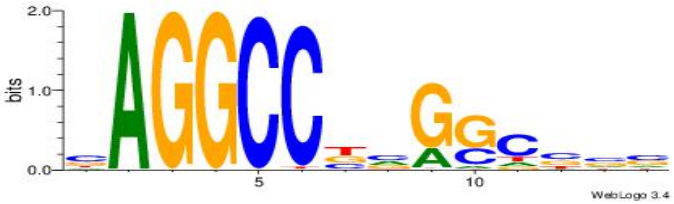
Alignment:

```
BBVGCCBVGGCCTV
---SCMVBBGGC--
```

Original motif Consensus sequence: BBVGCCBVGGCCTV



Reverse complement motif Consensus sequence: VAGGCCBBGGCVB

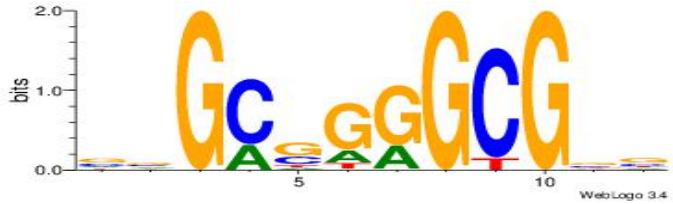


Dataset #:	4
Motif ID:	67
Motif name:	ssGMsGRGCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	9
Similarity score:	0.0612124

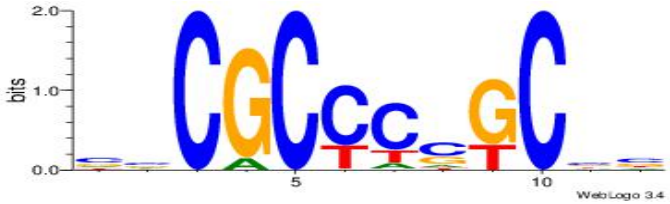
Alignment:

```
BBCGCCCSGCVV
---GCCBBVRGS
```

Original motif Consensus sequence: VVGCSGGGCGBB



Reverse complement motif Consensus sequence: BBCGCCCSGCVV



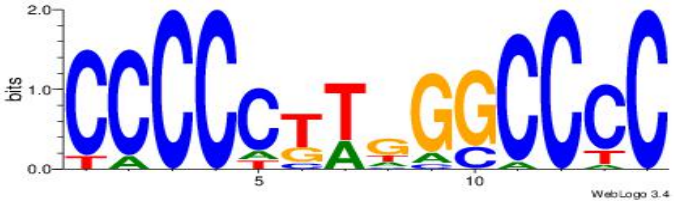
Dataset #:	3
Motif ID:	37
Motif name:	PLAG1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	9

Similarity score: 0.0638957

Alignment:
GGGGCCCAAGGGGG
---GCCBBVRGS--

Original motif Consensus sequence: GGGGCCCAAGGGGG

Reverse complement motif Consensus sequence: CCCCCTTGGGCCC

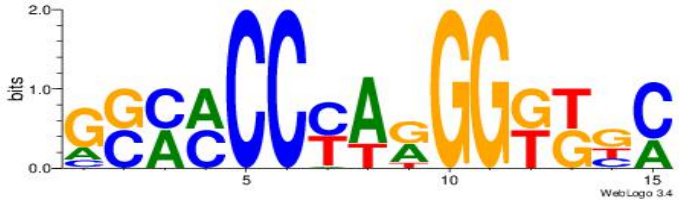


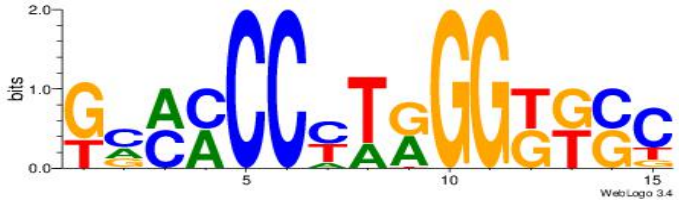
Dataset #: 3
Motif ID: 29
Motif name: Zfp423
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 4
Number of overlap: 9
Similarity score: 0.0662526

Alignment:
GYRYCCMTKGGYRSC
---SCMVBBGGC---

Original motif Consensus sequence: GSMMCCYARGGKKKC

Reverse complement motif Consensus sequence: GYRYCCMTKGGYR

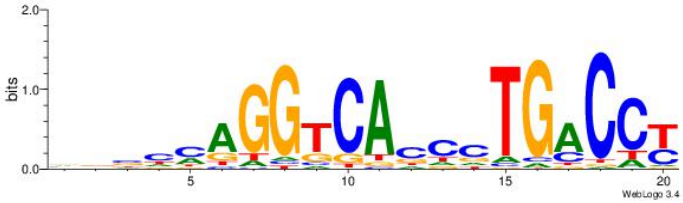




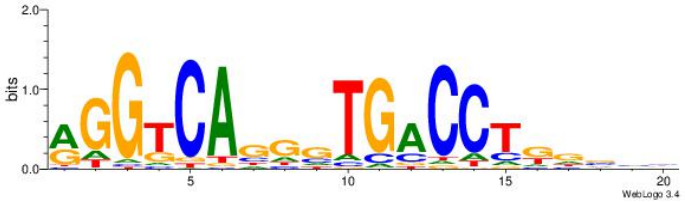
Dataset #: 3
Motif ID: 45
Motif name: ESR1
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 2
Number of overlap: 9
Similarity score: 0.067504

Alignment:
MGGTCAGGGTGACCTRDBHV
----------GCCBBVRGS-

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY



Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV



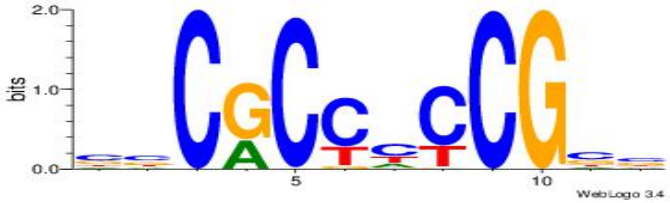
Dataset #: 4

Motif ID:	88
Motif name:	ssCrCYyYCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	9
Similarity score:	0.0711479

Alignment:

```
BBCRCCYCCGBB
---GCCBBVRGS
```

Original motif Consensus sequence: BBCRCCYCCGBB

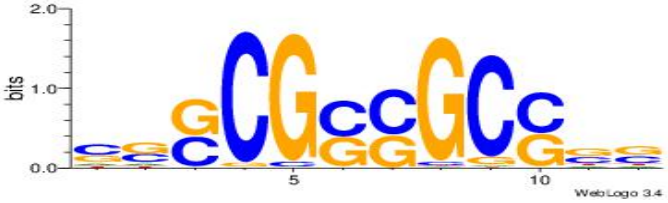


Reverse complement motif Consensus sequence: BBCGGKGGMGBB

Dataset #:	4
Motif ID:	78
Motif name:	sssCGssGCsss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	9
Similarity score:	0.0729061

Alignment:
SSSCGSSGCSSS
SCMVBBGGC---

Original motif Consensus sequence: SSSCGSSGCSSS



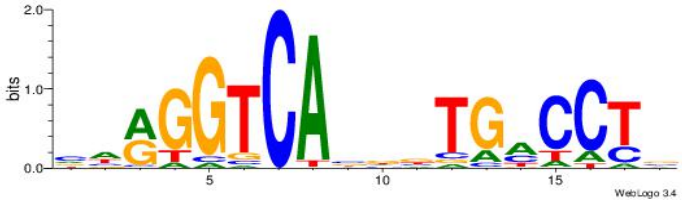
Reverse complement motif Consensus sequence: SSSGCSSCGSSS

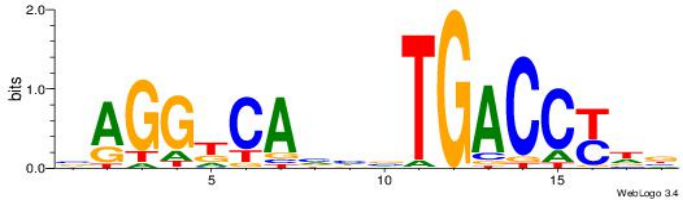
Dataset #:	3
Motif ID:	46
Motif name:	ESR2
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	9
Similarity score:	0.0756036

Alignment:
BAGGYCABHBTGACCKHV
-----SCMVBBGGC----

Original motif Consensus sequence: VHRGGTCABDBTGMCCTB

Reverse complement motif Consensus sequence: BAGGYCABHBTGACCKHV





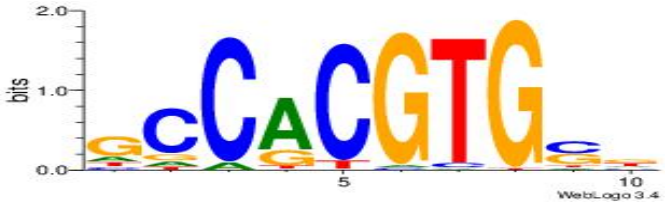
Dataset #:	3
Motif ID:	56
Motif name:	Mycn
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	9
Similarity score:	0.0775172

Alignment:

```
HSCACGTGGC
-SCMVBBGGC
```

Original motif Consensus sequence: HSCACGTGGC

Reverse complement motif Consensus sequence: GCCACGTGSD



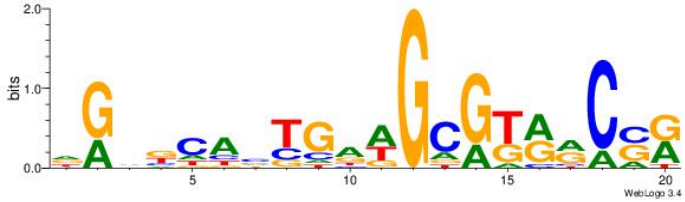
Dataset #:	3
Motif ID:	61

Motif name:	Pax5
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	8
Number of overlap:	9
Similarity score:	0.0805623

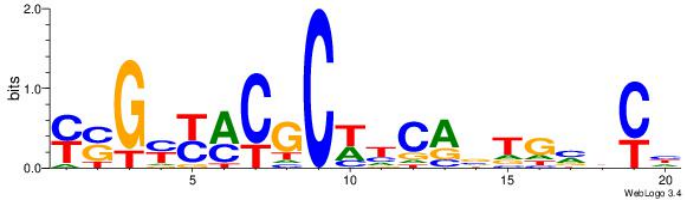
Alignment:

```
MSGKKRCGCWDCABTGBBCD
-------GCCBBVRGS----
```

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR

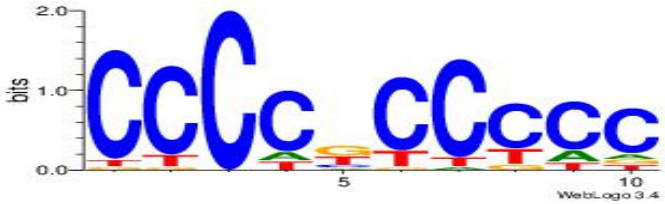


Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD

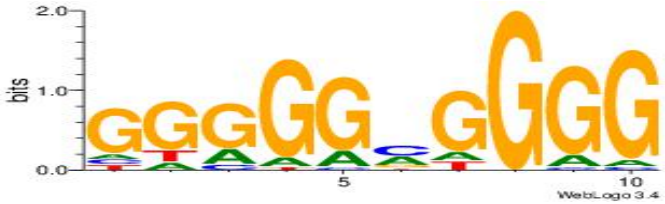


Dataset #: 3 Motif ID: 32 Motif name: SP1

Original motif Consensus sequence: CCCCKCCCCC



Reverse complement motif Consensus sequence: GGGGGYGGGG



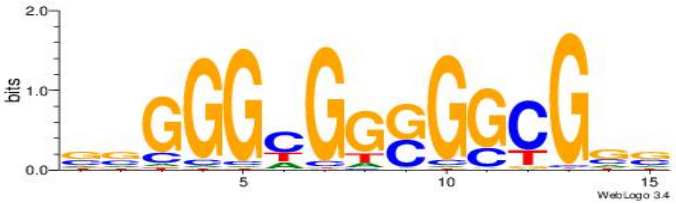
Best Matches for Motif ID 32 (Highest to Lowest)

Dataset #:	4
Motif ID:	91
Motif name:	ssCGCCsCCrCCCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	10
Similarity score:	0.030551

Alignment:
SSGGGCGGSGGCGSS
GGGGGYGGGG-----

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS

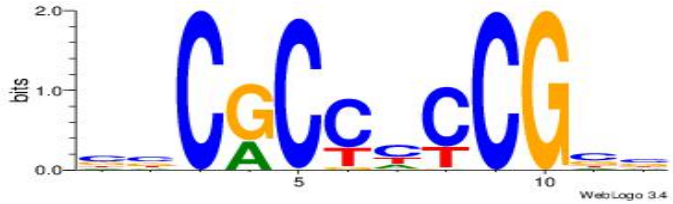


Dataset #:	4
Motif ID:	88
Motif name:	ssCrCYyYCGss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement

Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.061235

Alignment:
BBCGGKGGMGBB
GGGGGYGGGG--

Original motif Consensus sequence: BBCRCCYCCGBB

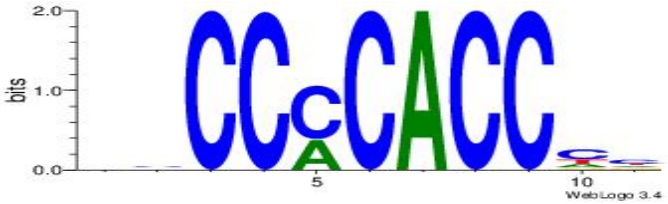


Reverse complement motif Consensus sequence: BBCGGKGGMGBB

Dataset #:	4
Motif ID:	89
Motif name:	ccCCmCACCcc
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0624534

Alignment:
DDGGTGRGGBD
GGGGGYGGGG-

Original motif Consensus sequence: HBCCMCACCHH



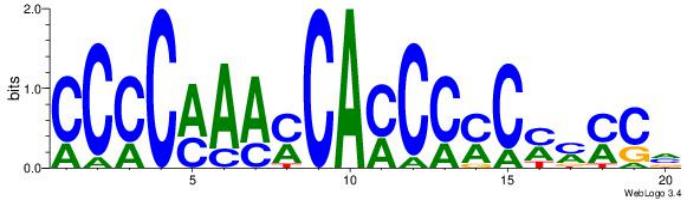
Reverse complement motif Consensus sequence: DDGGTGRGGBD

Dataset #:	3
Motif ID:	34
Motif name:	RREB1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	10
Similarity score:	0.0646465

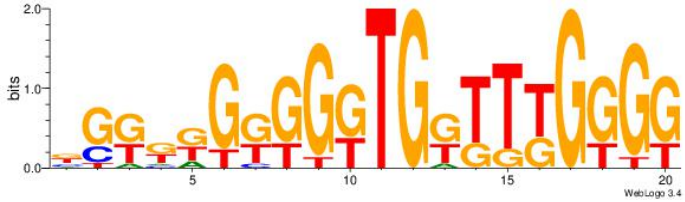
Alignment:

```
BGRRRGRGGRTGRTTYGGGG
-GGGGGYGGGG---------
```

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG

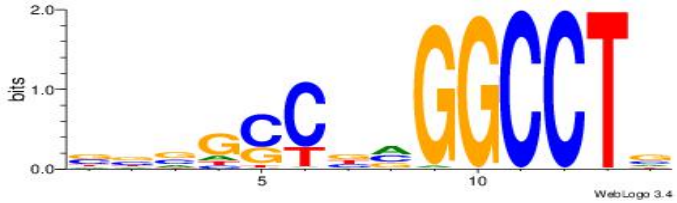


Dataset #:	3
Motif ID:	28
Motif name:	Zfx
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	10
Similarity score:	0.0664832

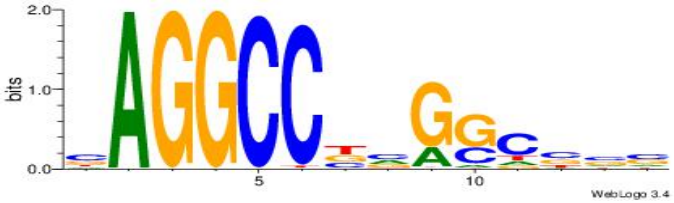
Alignment:

```
BBVGCCBVGGCCTV
----GGGGGYGGGG
```

Original motif Consensus sequence: BBVGCCBVGGCCTV



Reverse complement motif Consensus sequence: VAGGCCBBGGCVB



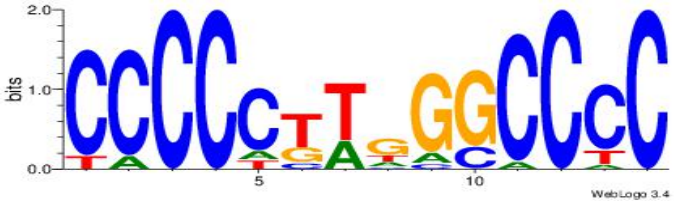
Dataset #:	3
Motif ID:	37
Motif name:	PLAG1
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	10

Similarity score: 0.0725

Alignment:
CCCCCTTGGGCCCC
-CCCCKCCCCC---

Original motif Consensus sequence: GGGGCCCAAGGGGG

Reverse complement motif Consensus sequence: CCCCCTTGGGCCC

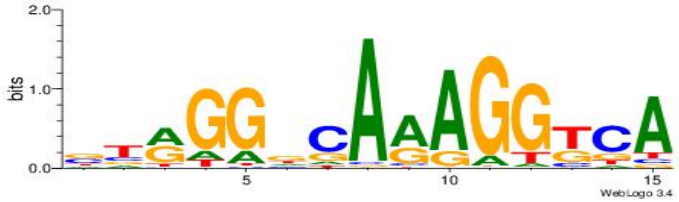


Dataset #: 3
Motif ID: 36
Motif name: PPARGRXRA
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 4
Number of overlap: 10
Similarity score: 0.0731995

Alignment:
TGRCCTKTGHCCKAB
--CCCCKCCCCC---

Original motif Consensus sequence: BTRGGDCARAGGKCA

Reverse complement motif Consensus sequence: TGRCCTKTGHCCK



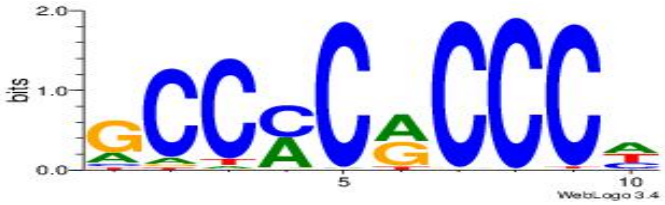
Dataset #:	3
Motif ID:	52
Motif name:	Klf4
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0761191

Alignment:

```
GCCYCMCCCD
CCCCKCCCCC
```

Original motif Consensus sequence: DGGGYGKGGC

Reverse complement motif Consensus sequence: GCCYCMCCCD



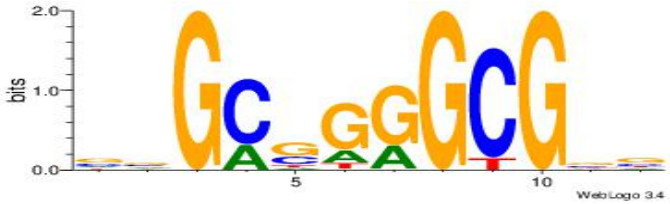
Dataset #:	4
Motif ID:	67

Motif name:	ssGMsGRGCGss
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:	0.0766895

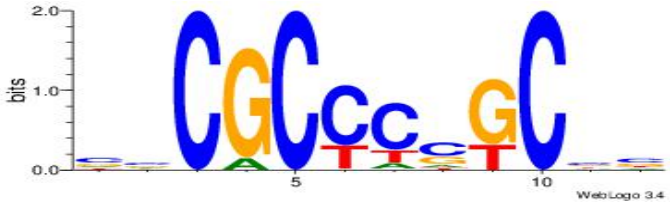
Alignment:

```
VVGCSGGGCGBB
GGGGGYGGGG--
```

Original motif Consensus sequence: VVGCSGGGCGBB



Reverse complement motif Consensus sequence: BBCGCCCSGCVV

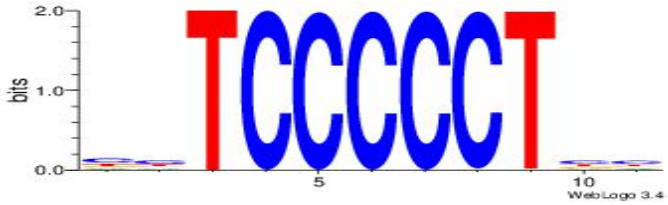


Dataset #:	4
Motif ID:	93
Motif name:	rrAGGGGGArr
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	10
Similarity score:	0.0787709

Alignment:
VVTCCCCCTVV
-CCCCKCCCCC

Original motif Consensus sequence: VVAGGGGGAVV

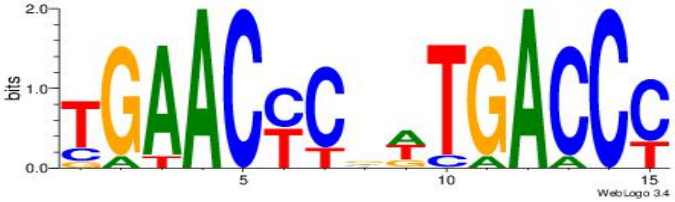
Reverse complement motif Consensus sequence: VVTCCCCCTVV



Dataset #: 3 Motif ID: 33 Motif name: RXRAVDR

Original motif Consensus sequence: GGGTCAWBGRGTTCA

Reverse complement motif Consensus sequence: TGAACKCBWTGAC



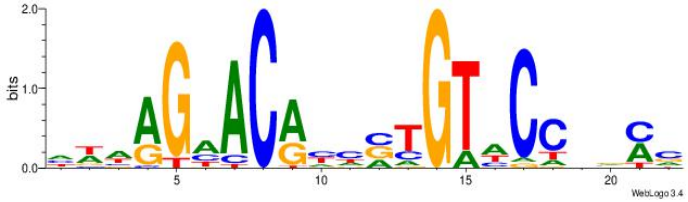
Best Matches for Motif ID 33 (Highest to Lowest)

Dataset #:	3
Motif ID:	40
Motif name:	Ar
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5

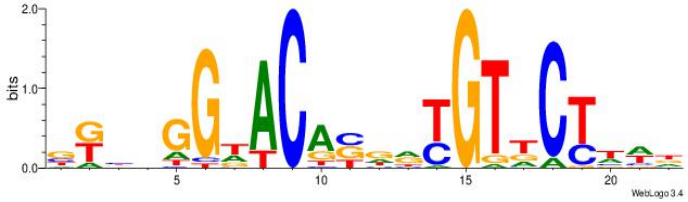
Number of overlap: 15
Similarity score: 0.0566667

Alignment:
HWDAGHACRHHVTGTHCCHVMV
---TGAACKCBWTGACCC----

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



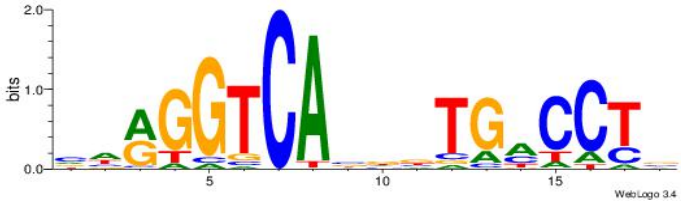
Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH



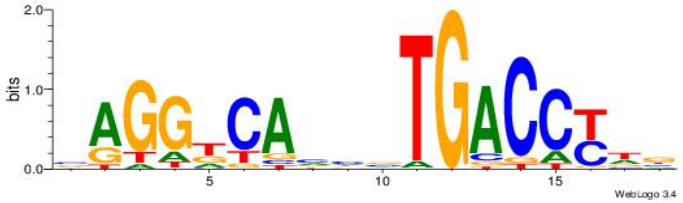
Dataset #: 3
Motif ID: 46
Motif name: ESR2
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 3
Number of overlap: 15
Similarity score: 0.0617507

Alignment:
VHRGGTCABDBTGMCCTB
--GGGTCAWBGRGTTCA-

Original motif Consensus sequence: VHRGGTCABDBTGMCCTB



Reverse complement motif Consensus sequence: BAGGYCABHBTGACCKHV

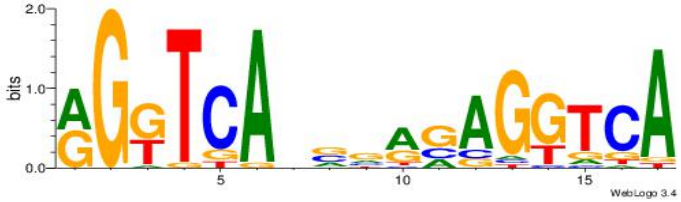


Dataset #:	3
Motif ID:	63
Motif name:	RXRRAR_DR5
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	15
Similarity score:	0.062029

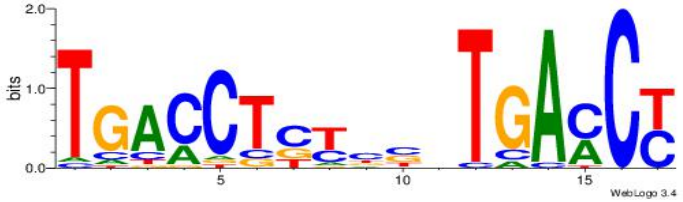
Alignment:

```
RGKTCABVVRGAGGTCA
GGGTCAWBGRGTTCA--
```

Original motif Consensus sequence: RGKTCABVVRGAGGTCA



Reverse complement motif Consensus sequence: TGACCTCKVVBTGAYCK

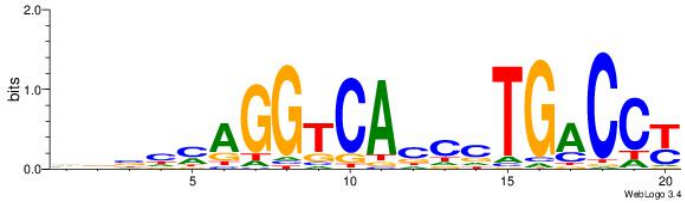


Dataset #:	3
Motif ID:	45
Motif name:	ESR1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	15
Similarity score:	0.0714525

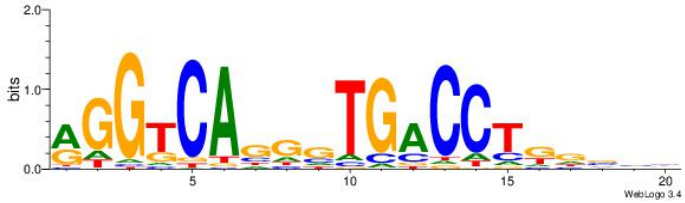
Alignment:

```
VDBHMAGGTCACCCTGACCY
-----TGAACKCBWTGACCC
```

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY



Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV

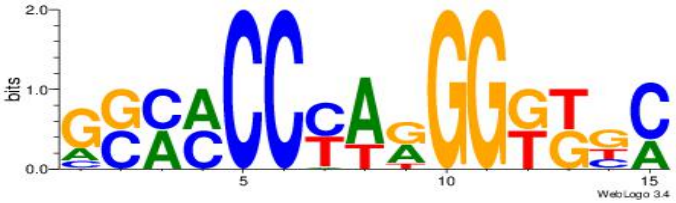


Dataset #:	3
Motif ID:	29
Motif name:	Zfp423
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1

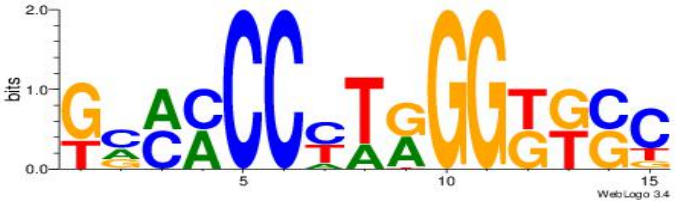
Number of overlap: 15
Similarity score: 0.0849495

Alignment:
GSMMCCYARGGKKKC
TGAACKCBWTGACCC

Original motif Consensus sequence: GSMMCCYARGGKKKC



Reverse complement motif Consensus sequence: GYRYCCMTKGGYR

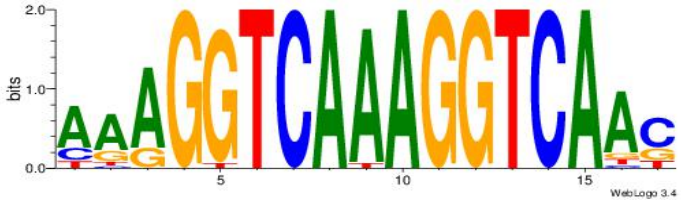


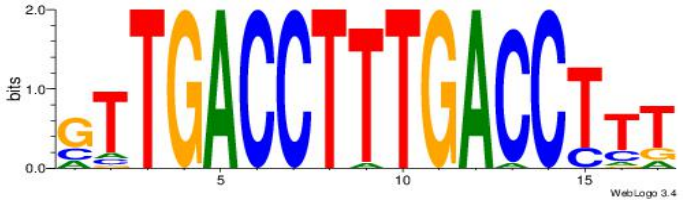
Dataset #: 3
Motif ID: 59
Motif name: NR1H2RXRA
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 3
Number of overlap: 15
Similarity score: 0.0866667

Alignment:
AAAGGTCAAAGGTCAAC
--GGGTCAWBGRGTTCA

Original motif Consensus sequence: AAAGGTCAAAGGTCAAC

Reverse complement motif Consensus sequence: GTTGACCTTTGACCTTT



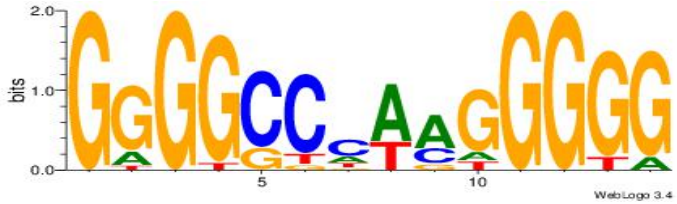


Dataset #:	3
Motif ID:	37
Motif name:	PLAG1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	13
Similarity score:	1.06201

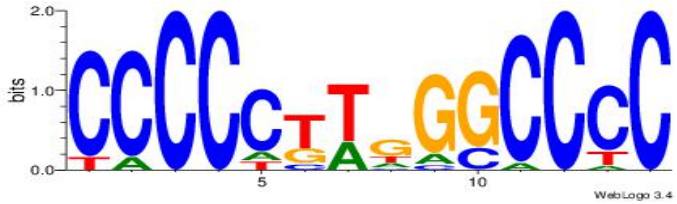
Alignment:

```
GGGGCCCAAGGGGG--
-GGGTCAWBGRGTTCA
```

Original motif Consensus sequence: GGGGCCCAAGGGGG



Reverse complement motif Consensus sequence: CCCCCTTGGGCCC



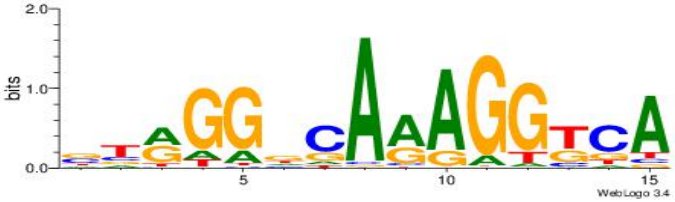
Dataset #:	3
Motif ID:	36

Motif name:	PPARGRXRA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	13
Similarity score:	1.07837

Alignment:

```
BTRGGDCARAGGKCA--
--GGGTCAWBGRGTTCA
```

Original motif Consensus sequence: BTRGGDCARAGGKCA

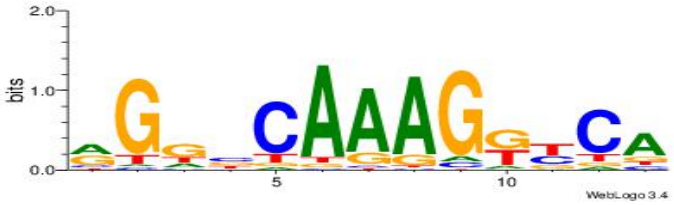


Reverse complement motif Consensus sequence: TGRCCTKTGHCCK

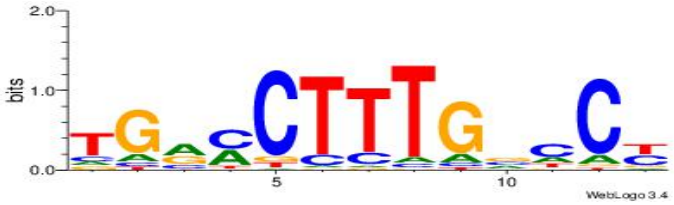
Dataset #:	3
Motif ID:	50
Motif name:	HNF4A
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	13
Similarity score:	1.0801

Alignment:
RGGBCAAAGKYCA--
GGGTCAWBGRGTTCA

Original motif Consensus sequence: RGGBCAAAGKYCA



Reverse complement motif Consensus sequence: TGMYCTTTGBCCK

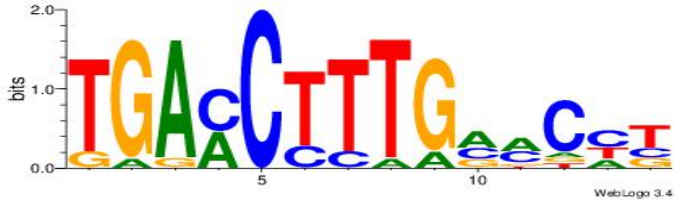


Dataset #:	3
Motif ID:	38
Motif name:	NR2F1
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	13
Similarity score:	1.08482

Alignment:
AKGYYCAAAGRTCA--
-GGGTCAWBGRGTTCA

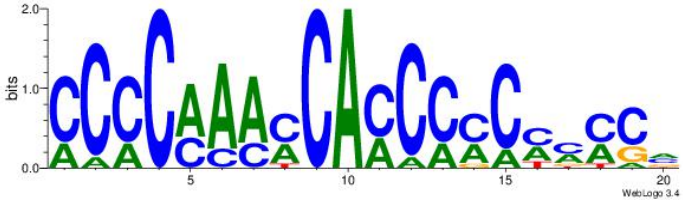
Original motif Consensus sequence: TGAMCTTTGMMCYT

Reverse complement motif Consensus sequence: AKGYYCAAAGRTCA

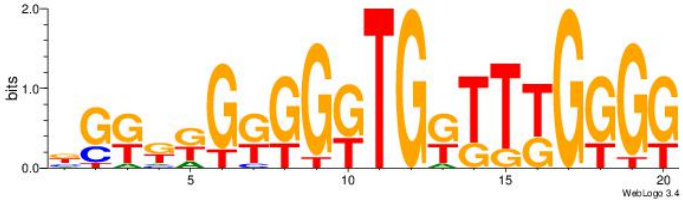


Dataset #: 3 **Motif ID: 34** **Motif name: RREB1**

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG



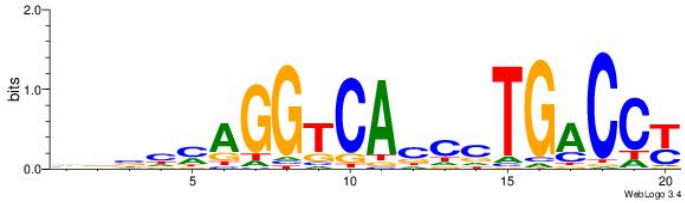
Best Matches for Motif ID 34 (Highest to Lowest)

Dataset #:	3
Motif ID:	45
Motif name:	ESR1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	19
Similarity score:	0.0874679

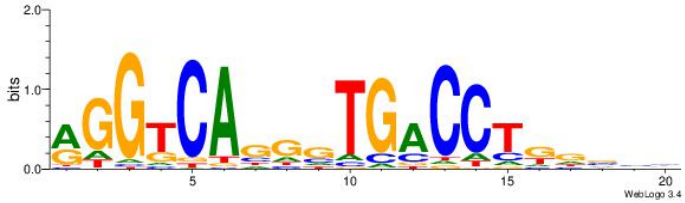
Alignment:

-MGGTCAGGGTGACCTRDBHV
BGRRRGRGGRTGRTTYGGGG-

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY



Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV

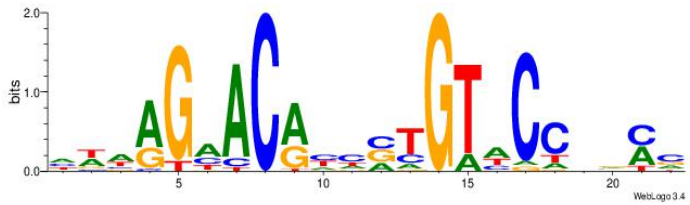


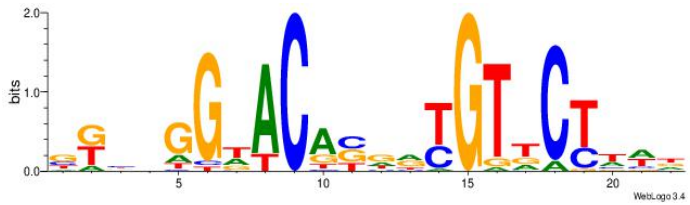
Dataset #:	3
Motif ID:	40
Motif name:	Ar
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	19
Similarity score:	0.0927532

Alignment:
-HWDAGHACRHHVTGTHCCHVMV
CCCCMAAMCAMCCMCMMMCV---

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV

Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH

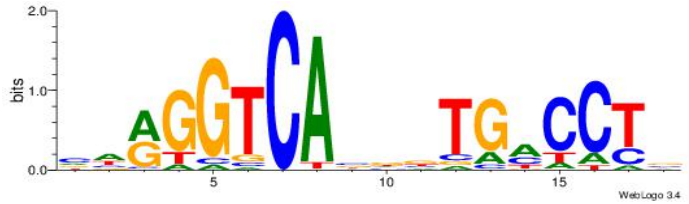




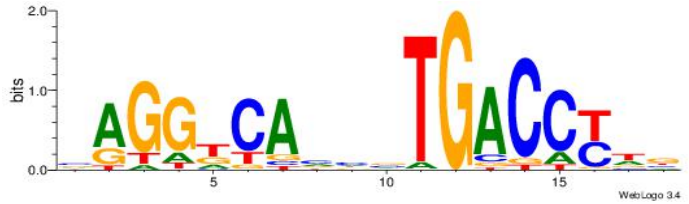
Dataset #:	3
Motif ID:	46
Motif name:	ESR2
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	18
Similarity score:	0.593122

Alignment:
BAGGYCABHBTGACCKHV--
BGRRRGRGGRTGRTTYGGGG

Original motif Consensus sequence: VHRGGTCABDBTGMCCTB



Reverse complement motif Consensus sequence:
BAGGYCABHBTGACCKHV



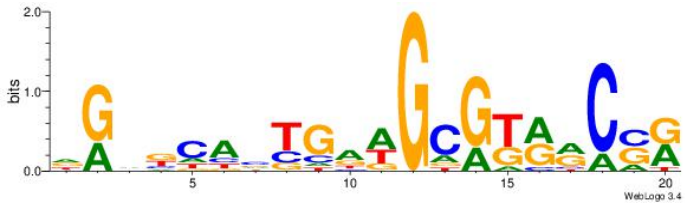
Dataset #:	3

Motif ID:	61
Motif name:	Pax5
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	17
Similarity score:	1.09431

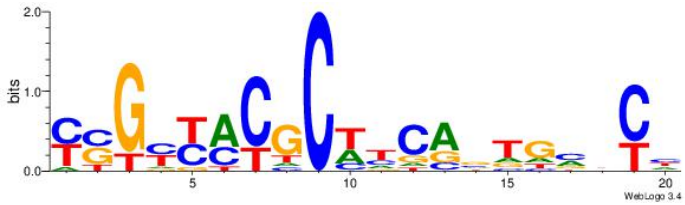
Alignment:

```
---DGVBCABTGDWGCGKRRCSR
BGRRRGRGGRTGRTTYGGGG---
```

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR



Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD



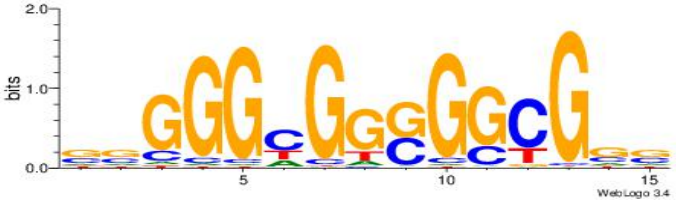
Dataset #:	4
Motif ID:	91
Motif name:	ssCGCCsCCrCCCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	15

Similarity score: 2.08176

Alignment:
SSCGCCSCCGCCCSS-----
CCCCMAAMCAMCCMCMMMCV

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS

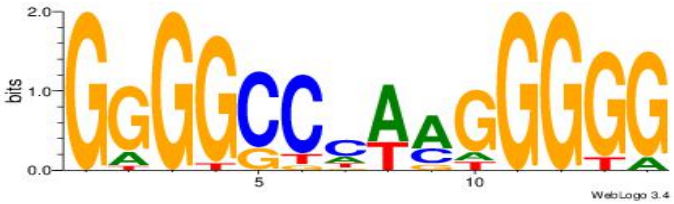


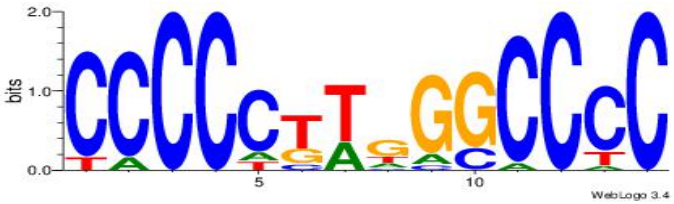
Dataset #: 3
Motif ID: 37
Motif name: PLAG1
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 1
Number of overlap: 14
Similarity score: 2.5804

Alignment:
CCCCCTTGGGCCCC------
CCCCMAAMCAMCCMCMMMCV

Original motif Consensus sequence: GGGGCCCAAGGGGG

Reverse complement motif Consensus sequence: CCCCCTTGGGCCC





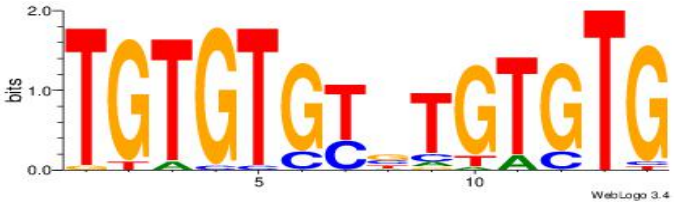
Dataset #:	2
Motif ID:	25
Motif name:	Motif 25
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	2.58596

Alignment:

```
------CACACAVRCACACA
CCCCMAAMCAMCCMCMMMCV
```

Original motif Consensus sequence: CACACAVRCACACA

Reverse complement motif Consensus sequence: TGTGTGKVTGTGT



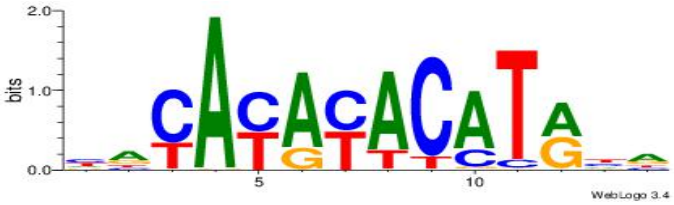
Dataset #:	4
Motif ID:	75

Motif name:	yayAyAyACATrya
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	2.5873

Alignment:

```
------HACAYAYACATRHD
CCCCMAAMCAMCCMCMMMCV
```

Original motif Consensus sequence: HACAYAYACATRHD

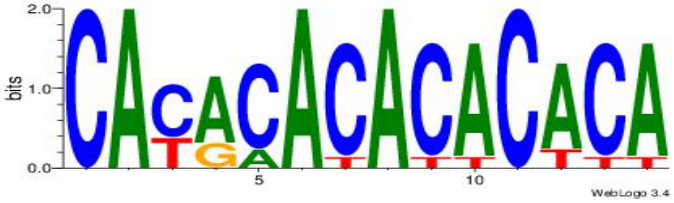


Reverse complement motif Consensus sequence: DHKATGTKTKTGT

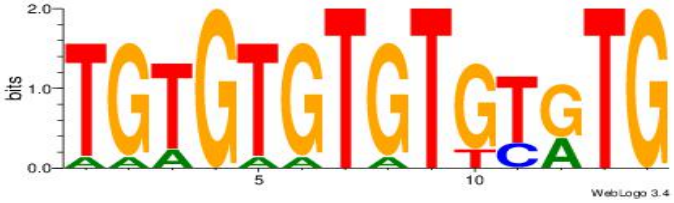
Dataset #:	2
Motif ID:	27
Motif name:	Motif 27
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	2.59077

Alignment:
------CAYACACACACACA
CCCCMAAMCAMCCMCMMMCV

Original motif Consensus sequence: CAYACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTKT

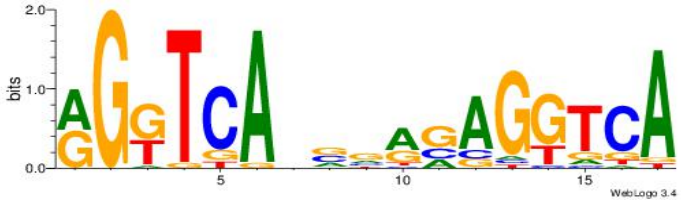


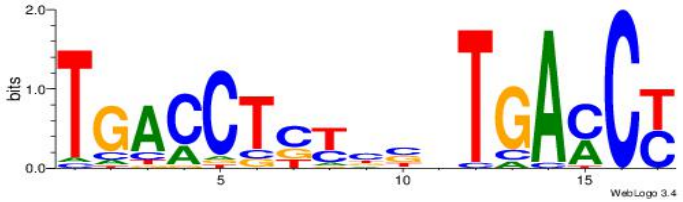
Dataset #:	3
Motif ID:	63
Motif name:	RXRRAR_DR5
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	13
Similarity score:	3.07964

Alignment:
RGKTCABVVRGAGGTCA-------
----BGRRRGRGGRTGRTTYGGGG

Original motif Consensus sequence: RGKTCABVVRGAGGTCA

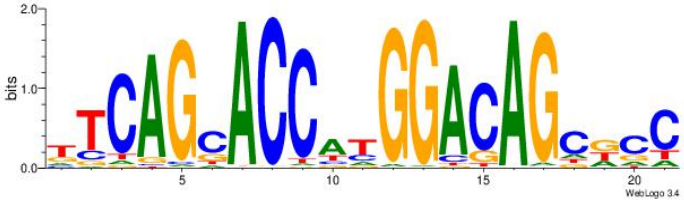
Reverse complement motif Consensus sequence: TGACCTCKVVBTGAYCK



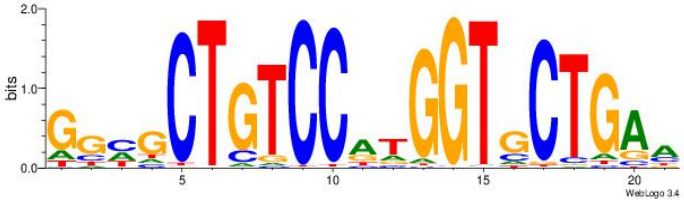


Dataset #: 3 Motif ID: 35 Motif name: REST

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC



Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA



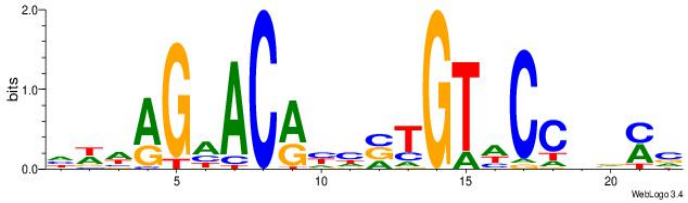
Best Matches for Motif ID 35 (Highest to Lowest)

Dataset #:	3
Motif ID:	40
Motif name:	Ar
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	21
Similarity score:	0.0685835

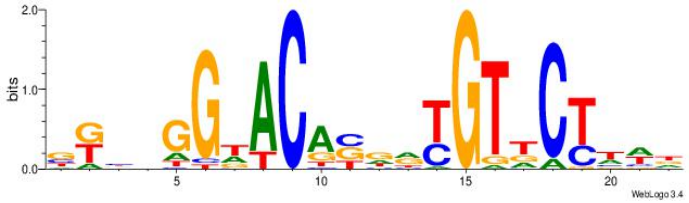
Alignment:

VRVDGGHACAVDDKGTHCTDWH
-GGYGCTGTCCATGGTGCTGAA

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH

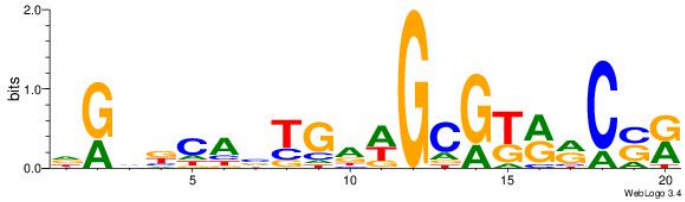


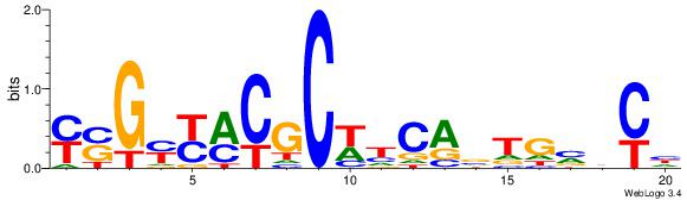
Dataset #:	3
Motif ID:	61
Motif name:	Pax5
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	18
Similarity score:	1.577

Alignment:
MSGKKRCGCWDCABTGBBCD---
--GGYGCTGTCCATGGTGCTGAA

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR

Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD



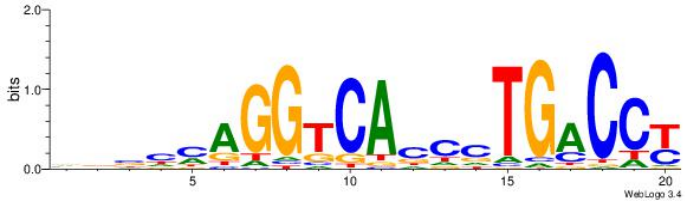


Dataset #:	3
Motif ID:	45
Motif name:	ESR1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	16
Similarity score:	2.56863

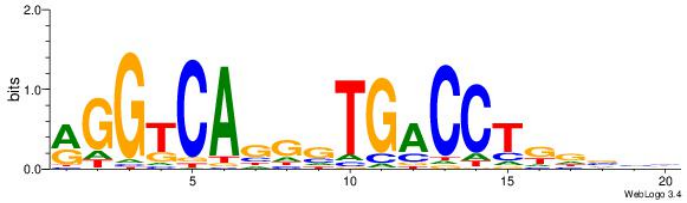
Alignment:

```
-----VDBHMAGGTCACCCTGACCY
TTCAGCACCATGGACAGCKCC----
```

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY



Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV



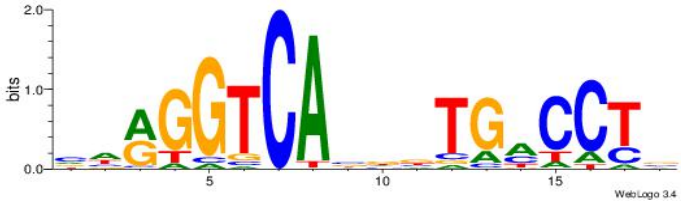
Dataset #:	3

Motif ID:	46
Motif name:	ESR2
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	13
Similarity score:	4.05754

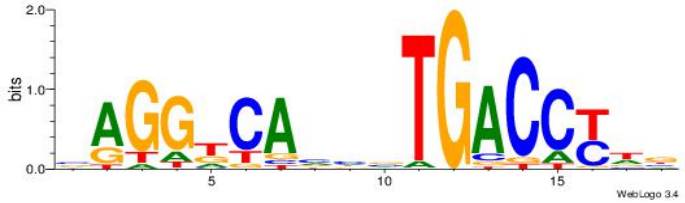
Alignment:

```
BAGGYCABHBTGACCKHV--------
-----GGYGCTGTCCATGGTGCTGAA
```

Original motif Consensus sequence: VHRGGTCABDBTGMCCTB



Reverse complement motif Consensus sequence: BAGGYCABHBTGACCKHV

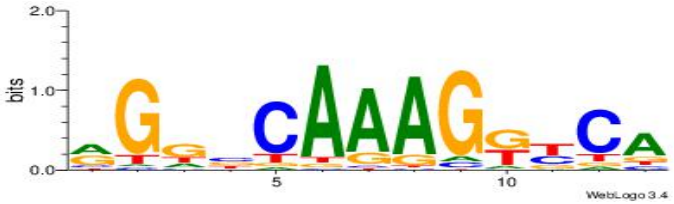


Dataset #:	3
Motif ID:	50
Motif name:	HNF4A
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	13

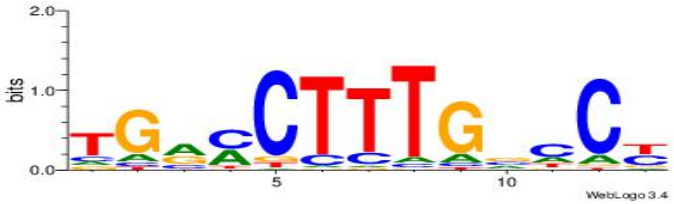
Similarity score: 4.06973

Alignment:
TGMYCTTTGBCCK--------
GGYGCTGTCCATGGTGCTGAA

Original motif Consensus sequence: RGGBCAAAGKYCA



Reverse complement motif Consensus sequence: TGMYCTTTGBCCK

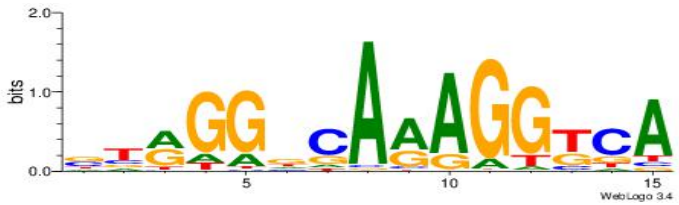


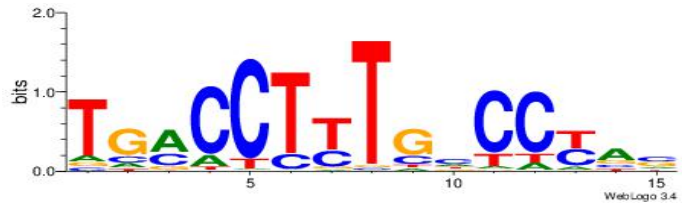
Dataset #: 3
Motif ID: 36
Motif name: PPARGRXRA
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 3
Number of overlap: 13
Similarity score: 4.07172

Alignment:
--------BTRGGDCARAGGKCA
TTCAGCACCATGGACAGCKCC--

Original motif Consensus sequence: BTRGGDCARAGGKCA

Reverse complement motif Consensus sequence: TGRCCTKTGHCCK



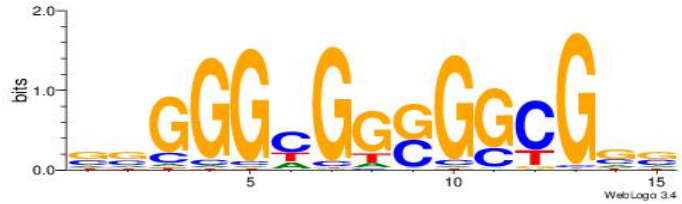


Dataset #: 4
Motif ID: 91
Motif name: ssCGCCsCCrCCCss
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 4
Number of overlap: 12
Similarity score: 4.56521

Alignment:
SSCGCCSCCGCCCSS---------
---GGYGCTGTCCATGGTGCTGAA

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS



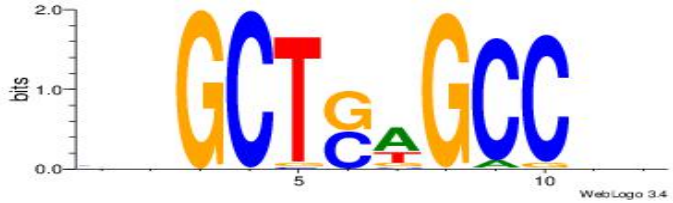
Dataset #: 4

Motif ID:	77
Motif name:	ssGCTswGCCms
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	4.56618

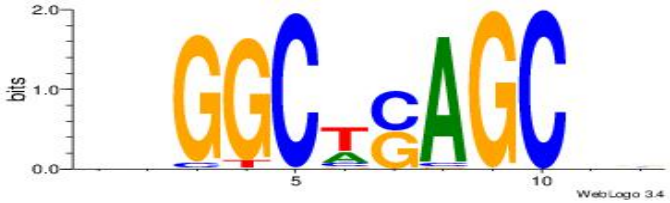
Alignment:

```
---------VBGCTSAGCCHB
TTCAGCACCATGGACAGCKCC
```

Original motif Consensus sequence: VBGCTSAGCCHB



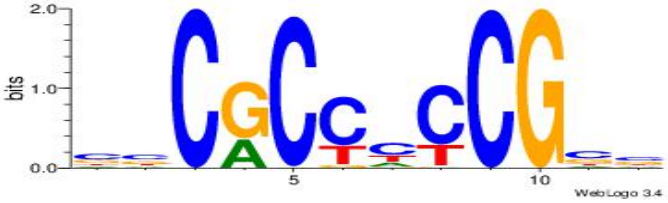
Reverse complement motif Consensus sequence: BDGGCTSAGCBV



Dataset #:	4
Motif ID:	88
Motif name:	ssCrCYyYCGss
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:	4.57063

Alignment:
BBCRCCYCCGBB---------
GGYGCTGTCCATGGTGCTGAA

Original motif Consensus sequence: BBCRCCYCCGBB



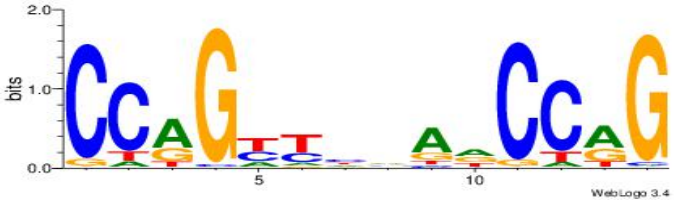
Reverse complement motif Consensus sequence: BBCGGKGGMGBB

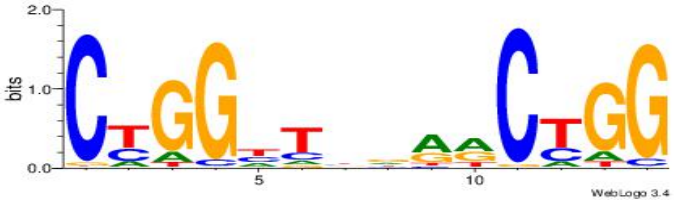
Dataset #:	3
Motif ID:	64
Motif name:	Tcfcp2l1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	12
Similarity score:	4.57098

Alignment:
CCAGYYHVADCCRG---------
--GGYGCTGTCCATGGTGCTGAA

Original motif Consensus sequence: CCAGYYHVADCCRG

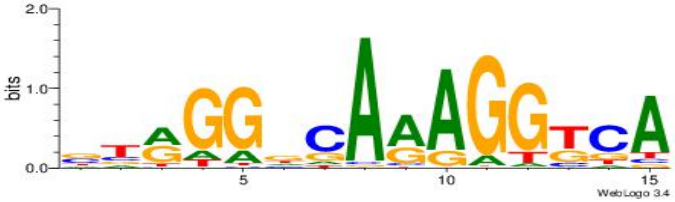
Reverse complement motif Consensus sequence: CKGGDTBDMMCT





Dataset #: 3 **Motif ID: 36** **Motif name: PPARGRXRA**

Original motif Consensus sequence: BTRGGDCARAGGKCA



Reverse complement motif Consensus sequence: TGRCCTKTGHCCK

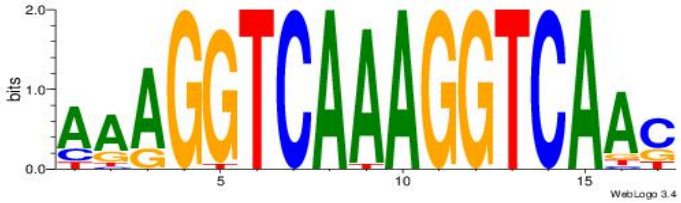
Best Matches for Motif ID 36 (Highest to Lowest)

Dataset #:	3
Motif ID:	59
Motif name:	NR1H2RXRA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	15
Similarity score:	0.0442974

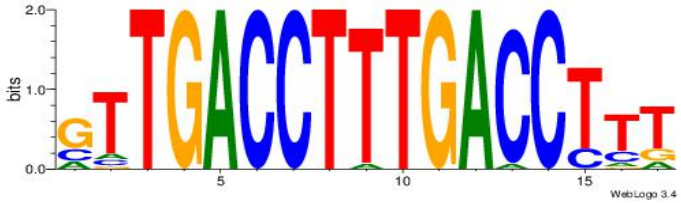
Alignment:

```
AAAGGTCAAAGGTCAAC
BTRGGDCARAGGKCA--
```

Original motif Consensus sequence: AAAGGTCAAAGGTCAAC



Reverse complement motif Consensus sequence: GTTGACCTTTGACCTTT

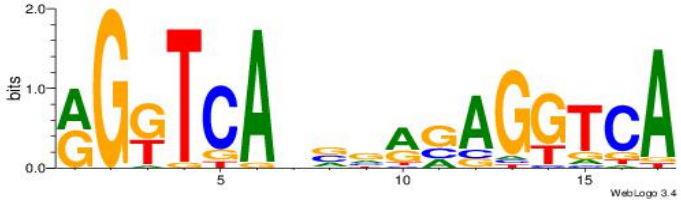


Dataset #:	3
Motif ID:	63
Motif name:	RXRRAR_DR5
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	15
Similarity score:	0.0500583

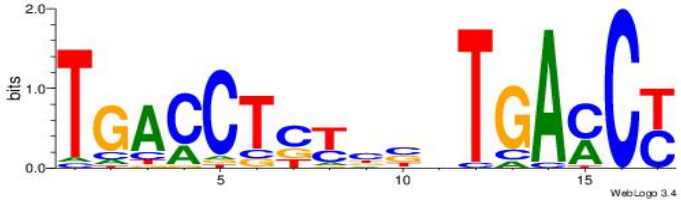
Alignment:

```
RGKTCABVVRGAGGTCA
--BTRGGDCARAGGKCA
```

Original motif Consensus sequence: RGKTCABVVRGAGGTCA



Reverse complement motif Consensus sequence: TGACCTCKVVBTGAYCK

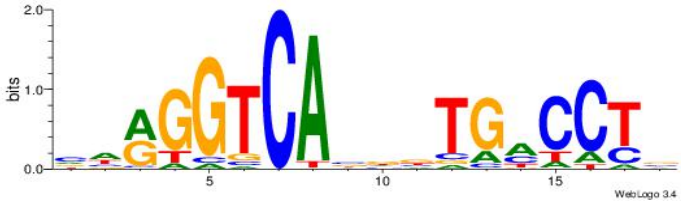


Dataset #:	3
Motif ID:	46
Motif name:	ESR2
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	15
Similarity score:	0.0602408

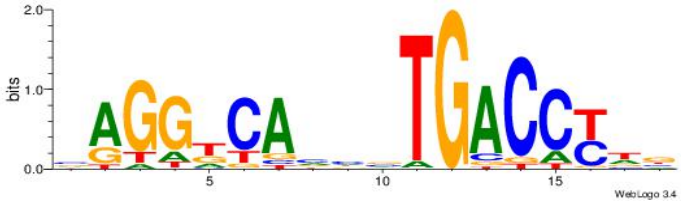
Alignment:

```
VHRGGTCABDBTGMCCTB
BTRGGDCARAGGKCA---
```

Original motif Consensus sequence: VHRGGTCABDBTGMCCTB



Reverse complement motif Consensus sequence: BAGGYCABHBTGACCKHV

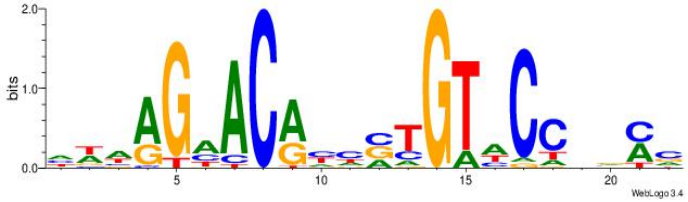


Dataset #:	3
Motif ID:	40
Motif name:	Ar
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8

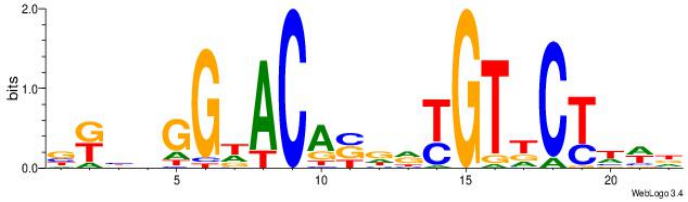
Number of overlap: 15
Similarity score: 0.0714981

Alignment:
HWDAGHACRHHVTGTHCCHVMV
-------TGRCCTKTGHCCKAB

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



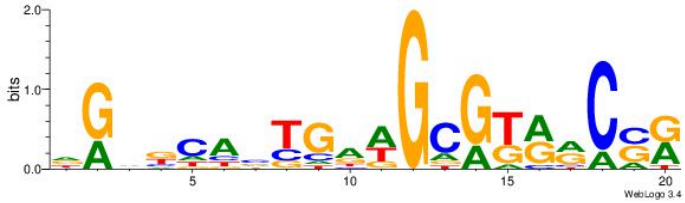
Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH



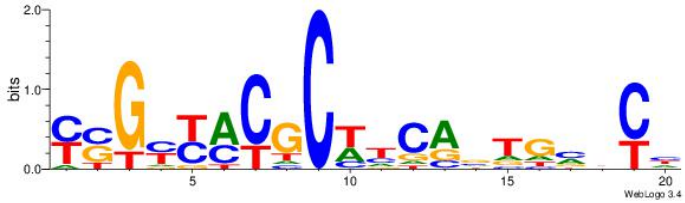
Dataset #: 3
Motif ID: 61
Motif name: Pax5
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 4
Number of overlap: 15
Similarity score: 0.0720255

Alignment:
MSGKKRCGCWDCABTGBBCD
---TGRCCTKTGHCCKAB--

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR



Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD

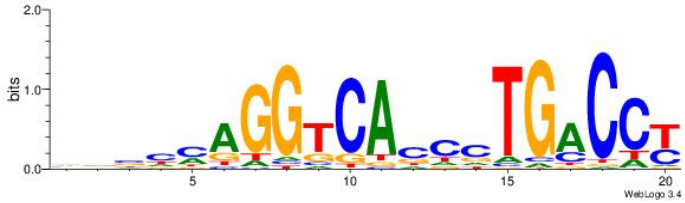


Dataset #:	3
Motif ID:	45
Motif name:	ESR1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	15
Similarity score:	0.0723092

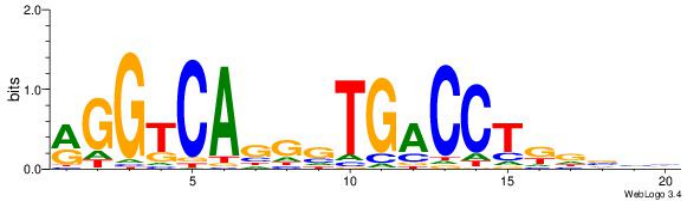
Alignment:

```
VDBHMAGGTCACCCTGACCY
---BTRGGDCARAGGKCA--
```

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY



Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV

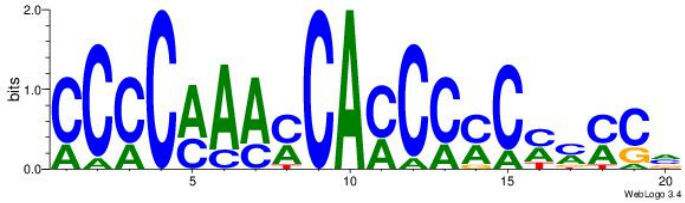


Dataset #:	3
Motif ID:	34
Motif name:	RREB1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	15
Similarity score:	0.0755648

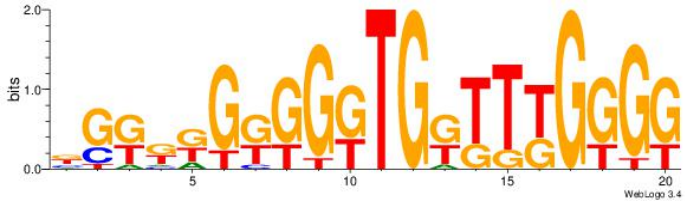
Alignment:

```
CCCCMAAMCAMCCMCMMMCV
-TGRCCTKTGHCCKAB----
```

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG

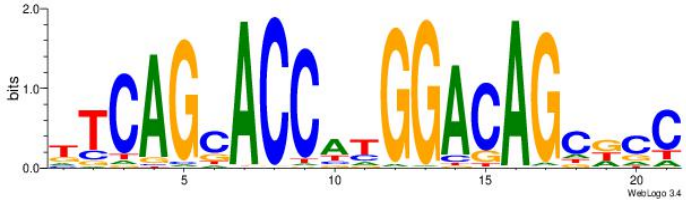


Dataset #:	3
Motif ID:	35
Motif name:	REST
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2

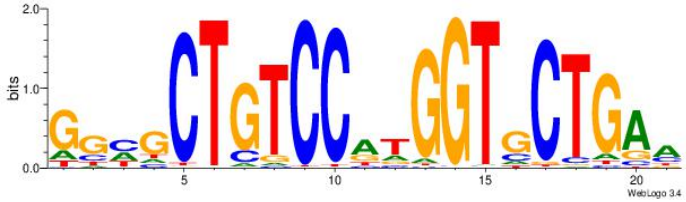
Number of overlap: 15
Similarity score: 0.0796159

Alignment:
TTCAGCACCATGGACAGCKCC
-BTRGGDCARAGGKCA-----

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC



Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA

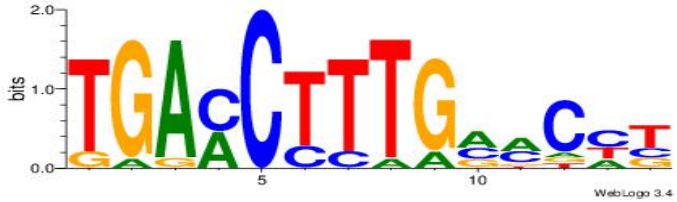


Dataset #: 3
Motif ID: 38
Motif name: NR2F1
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 14
Similarity score: 0.536521

Alignment:
TGAMCTTTGMMCYT-
TGRCCTKTGHCCKAB

Original motif Consensus sequence: TGAMCTTTGMMCYT

Reverse complement motif Consensus sequence: AKGYYCAAAGRTC

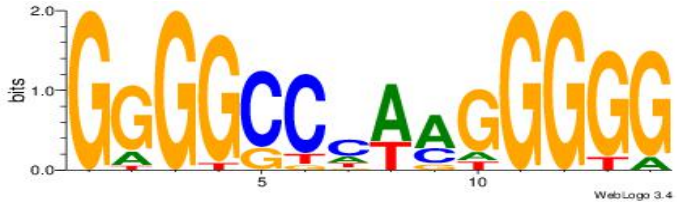


Dataset #:	3
Motif ID:	37
Motif name:	PLAG1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.575248

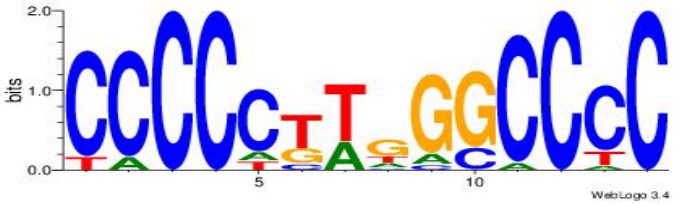
Alignment:

```
-GGGGCCCAAGGGGG
BTRGGDCARAGGKCA
```

Original motif Consensus sequence: GGGGCCCAAGGGGG

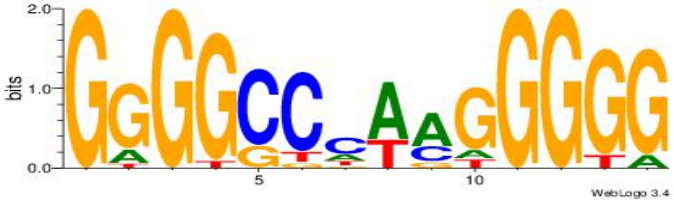


Reverse complement motif Consensus sequence: CCCCCTTGGGCCC

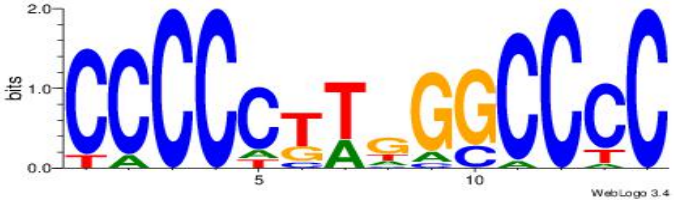


Dataset #: 3 Motif ID: 37 Motif name: PLAG1

Original motif Consensus sequence: GGGGCCCAAGGGGG



Reverse complement motif Consensus sequence: CCCCCTTGGGCCC



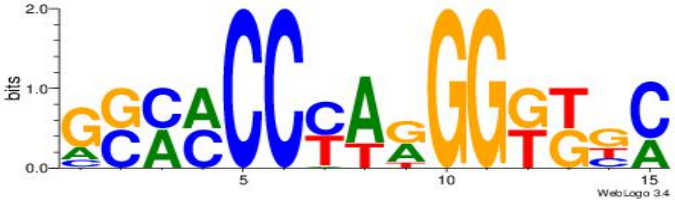
Best Matches for Motif ID 37 (Highest to Lowest)

Dataset #:	3
Motif ID:	29
Motif name:	Zfp423
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:	0.0944264

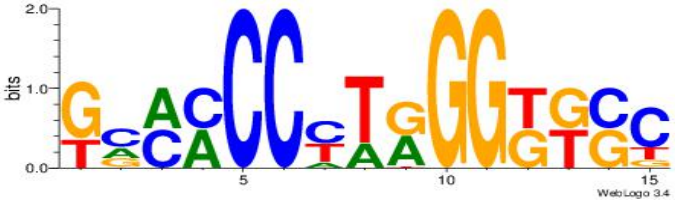
Alignment:

```
GSMMCCYARGGKKKC
GGGGCCCAAGGGGG-
```

Original motif Consensus sequence: GSMMCCYARGGKKKC



Reverse complement motif Consensus sequence: GYRYCCMTKGGYR

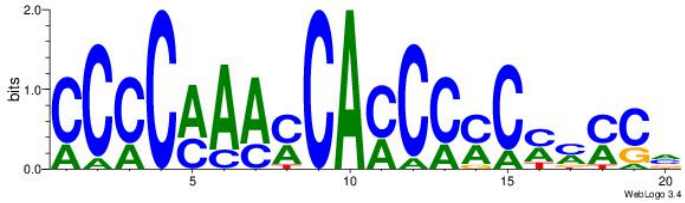


Dataset #:	3
Motif ID:	34
Motif name:	RREB1
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	14
Similarity score:	0.102814

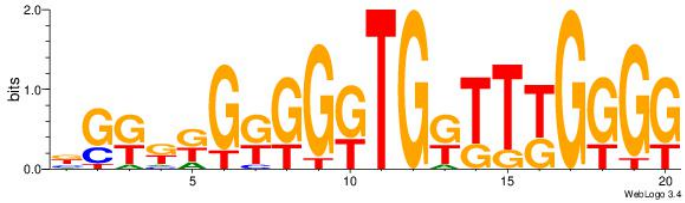
Alignment:

```
BGRRRGRGGRTGRTTYGGGG
GGGGCCCAAGGGGG------
```

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG



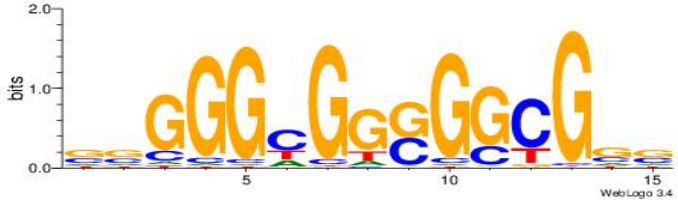
Dataset #:	4
Motif ID:	91
Motif name:	ssCGCCsCCrCCCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2

Number of overlap: 14
Similarity score: 0.107124

Alignment:
SSCGCCSCCGCCCSS
-CCCCCTTGGGCCCC

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS

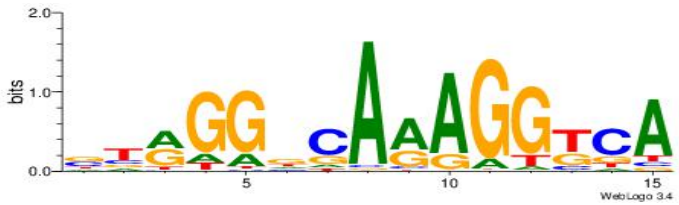


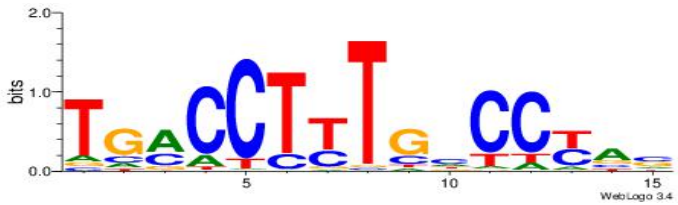
Dataset #: 3
Motif ID: 36
Motif name: PPARGRXRA
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 2
Number of overlap: 14
Similarity score: 0.107206

Alignment:
BTRGGDCARAGGKCA
-GGGGCCCAAGGGGG

Original motif Consensus sequence: BTRGGDCARAGGKCA

Reverse complement motif Consensus sequence: TGRCCTKTGHCCK

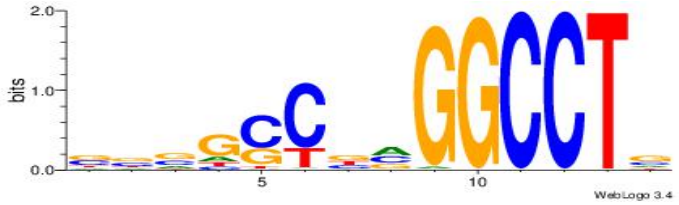




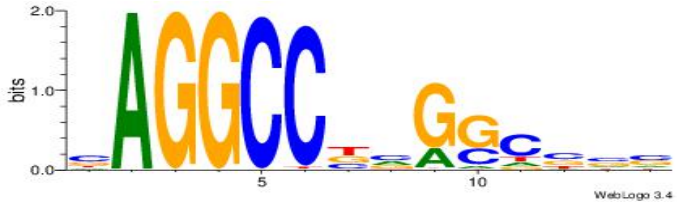
Dataset #:	3
Motif ID:	28
Motif name:	Zfx
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.111315

Alignment:
VAGGCCBBGGCVBB
GGGGCCCAAGGGGG

Original motif Consensus sequence: BBVGCCBVGGCCTV



Reverse complement motif Consensus sequence: VAGGCCBBGGCVB



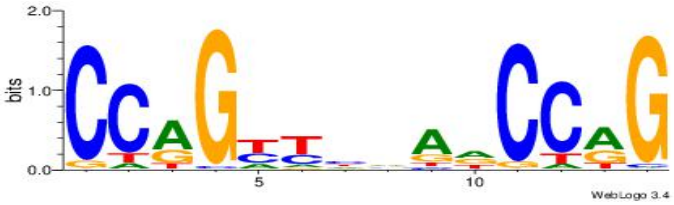
Dataset #:	3
Motif ID:	64

Motif name:	Tcfcp2l1
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:	0.115151

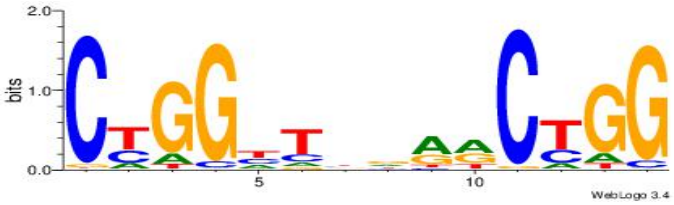
Alignment:

```
CCAGYYHVADCCRG
CCCCCTTGGGCCCC
```

Original motif Consensus sequence: CCAGYYHVADCCRG



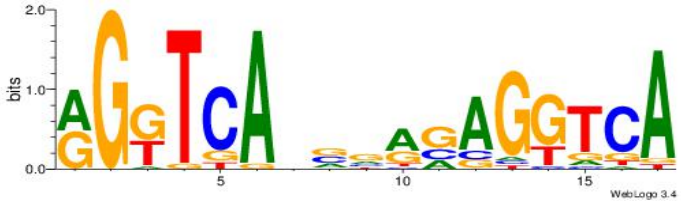
Reverse complement motif Consensus sequence: CKGGDTBDMMCT



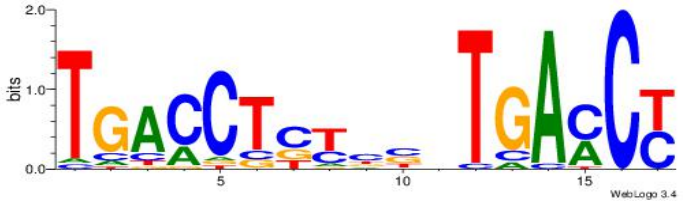
Dataset #:	3
Motif ID:	63
Motif name:	RXRRAR_DR5
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	14
Similarity score:	0.116287

Alignment:
RGKTCABVVRGAGGTCA
GGGGCCCAAGGGGG---

Original motif Consensus sequence: RGKTCABVVRGAGGTCA



Reverse complement motif Consensus sequence:
TGACCTCKVVBTGAYCK

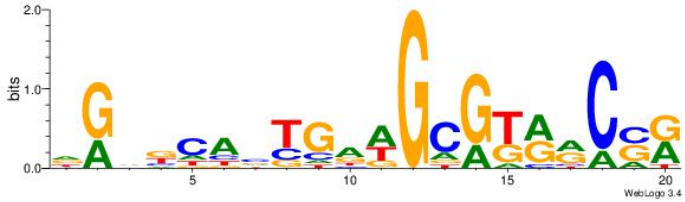


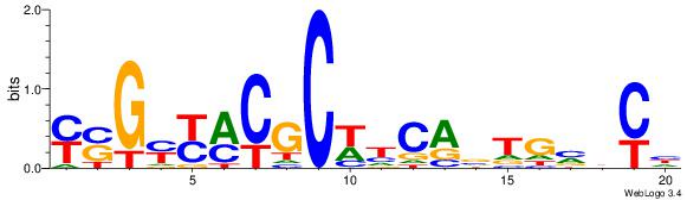
Dataset #:	3
Motif ID:	61
Motif name:	Pax5
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.117063

Alignment:
DGVBCABTGDWGCGKRRCSR
GGGGCCCAAGGGGG------

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR

Reverse complement motif Consensus sequence:
MSGKKRCGCWDCABTGBBCD





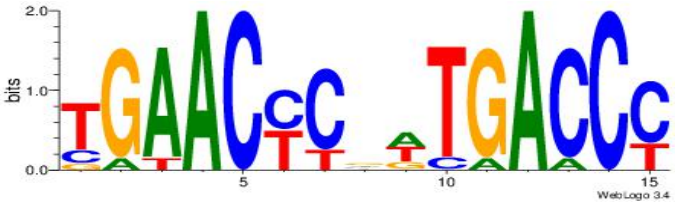
Dataset #:	3
Motif ID:	33
Motif name:	RXRAVDR
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	13
Similarity score:	0.590064

Alignment:

```
-GGGTCAWBGRGTTCA
GGGGCCCAAGGGGG--
```

Original motif Consensus sequence: GGGTCAWBGRGTTCA

Reverse complement motif Consensus sequence: TGAACKCBWTGAC



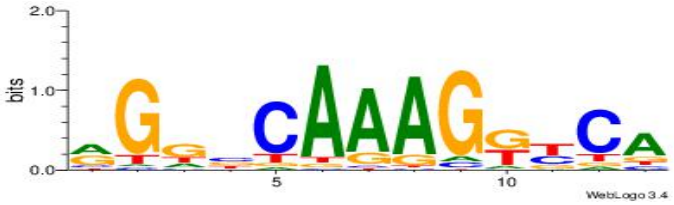
Dataset #:	3
Motif ID:	50

Motif name:	HNF4A
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	13
Similarity score:	0.603385

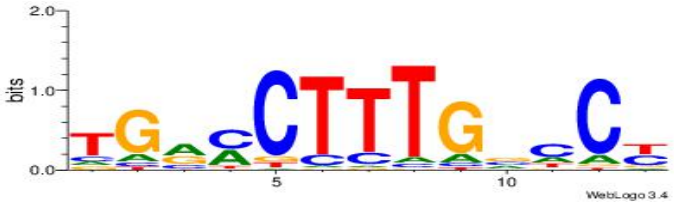
Alignment:

```
-RGGBCAAAGKYCA
GGGGCCCAAGGGGG
```

Original motif Consensus sequence: RGGBCAAAGKYCA

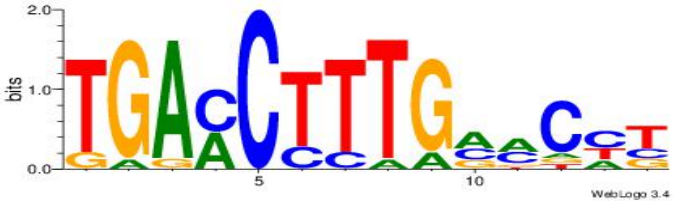


Reverse complement motif Consensus sequence: TGMYCTTTGBCCK



Dataset #: 3 Motif ID: 38 Motif name: NR2F1

Original motif Consensus sequence: TGAMCTTTGMMCYT



Reverse complement motif Consensus sequence: AKGYYCAAAGRTCA

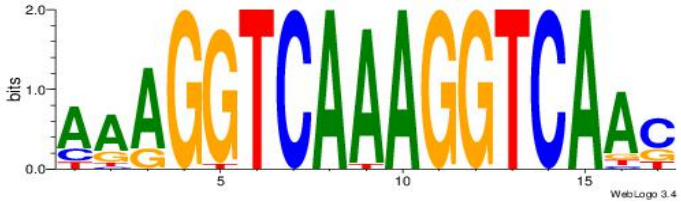
Best Matches for Motif ID 38 (Highest to Lowest)

Dataset #:	3
Motif ID:	59
Motif name:	NR1H2RXRA
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0174588

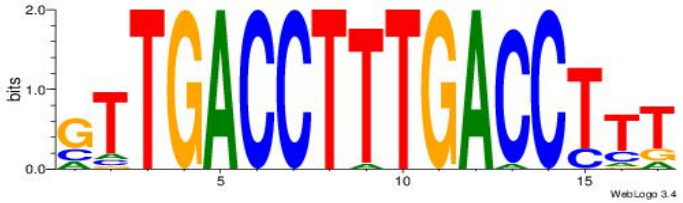
Alignment:

```
GTTGACCTTTGACCTTT
--TGAMCTTTGMMCYT-
```

Original motif Consensus sequence: AAAGGTCAAAGGTCAAC



Reverse complement motif Consensus sequence: GTTGACCTTTGACCTTT



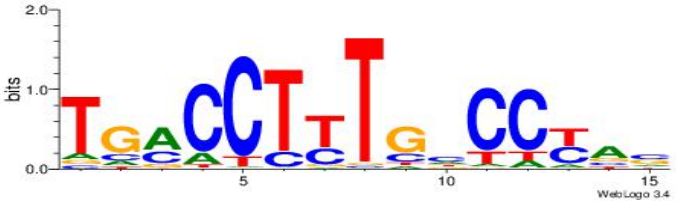
Dataset #:	3
Motif ID:	36
Motif name:	PPARGRXRA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2

Number of overlap: 14
Similarity score: 0.0278283

Alignment:
BTRGGDCARAGGKCA
AKGYYCAAAGRTCA-

Original motif Consensus sequence: BTRGGDCARAGGKCA

Reverse complement motif Consensus sequence: TGRCCTKTGHCCK

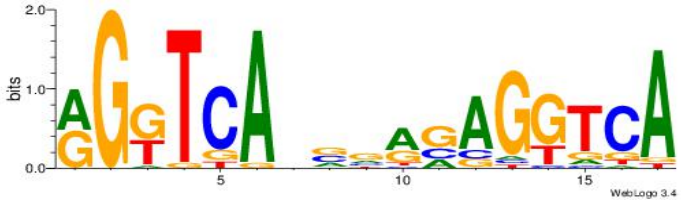


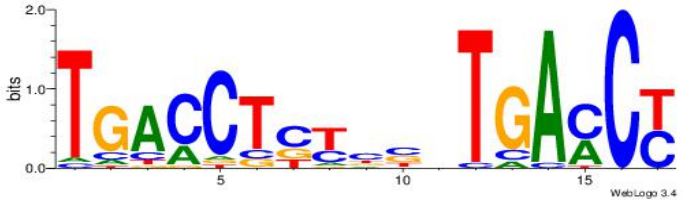
Dataset #: 3
Motif ID: 63
Motif name: RXRRAR_DR5
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 1
Number of overlap: 14
Similarity score: 0.0625328

Alignment:
RGKTCABVVRGAGGTCA
---AKGYYCAAAGRTCA

Original motif Consensus sequence: RGKTCABVVRGAGGTCA

Reverse complement motif Consensus sequence: TGACCTCKVVBTGAYCK

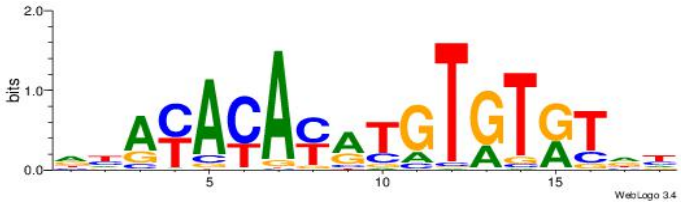




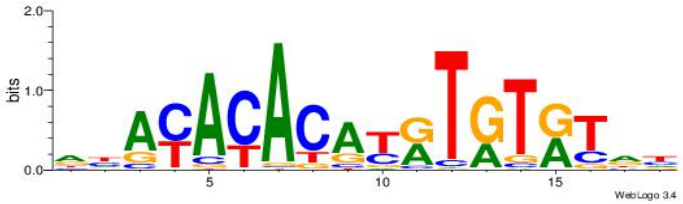
Dataset #: 4
Motif ID: 97
Motif name: ryayAyAyrtGTRTrTry
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 5
Number of overlap: 14
Similarity score: 0.0706629

Alignment:
HDAMACACAKKTKTKTHD
AKGYYCAAAGRTCA----

Original motif Consensus sequence: DHAYAYAYRTGTGTRTDH



Reverse complement motif Consensus sequence: HDAMACACAKKTKTKTHD



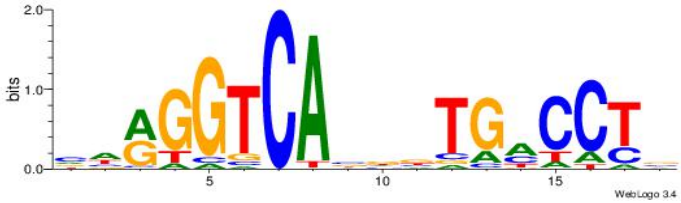
Dataset #: 3

Motif ID:	46
Motif name:	ESR2
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	14
Similarity score:	0.0710475

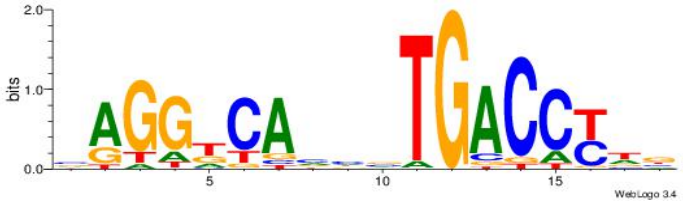
Alignment:

```
BAGGYCABHBTGACCKHV
---TGAMCTTTGMMCYT-
```

Original motif Consensus sequence: VHRGGTCABDBTGMCCTB



Reverse complement motif Consensus sequence: BAGGYCABHBTGACCKHV

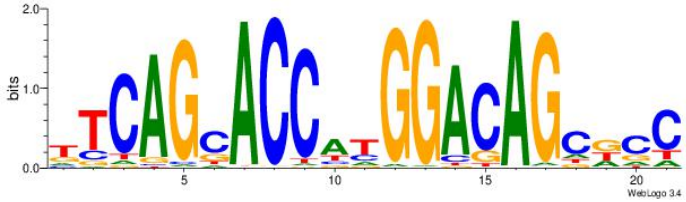


Dataset #:	3
Motif ID:	35
Motif name:	REST
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	14

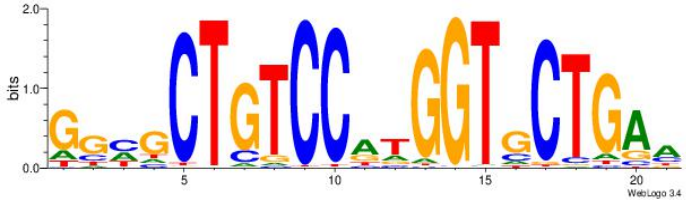
Similarity score: 0.071796

Alignment:
GGYGCTGTCCATGGTGCTGAA
--TGAMCTTTGMMCYT-----

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC



Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA

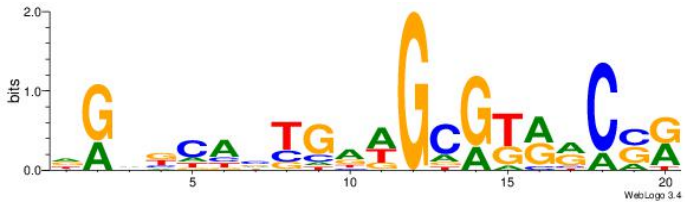


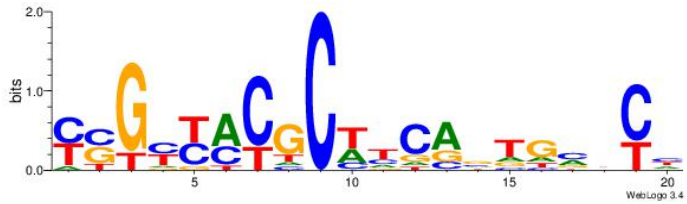
Dataset #: 3
Motif ID: 61
Motif name: Pax5
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 5
Number of overlap: 14
Similarity score: 0.0741987

Alignment:
MSGKKRCGCWDCABTGBBCD
----TGAMCTTTGMMCYT--

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR

Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD



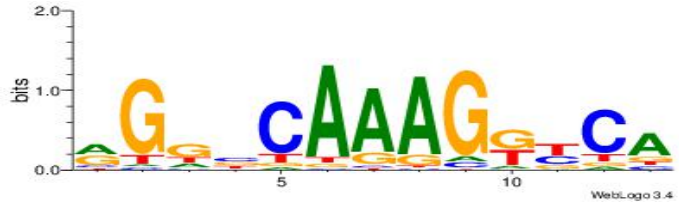


Dataset #:	3
Motif ID:	50
Motif name:	HNF4A
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	13
Similarity score:	0.514048

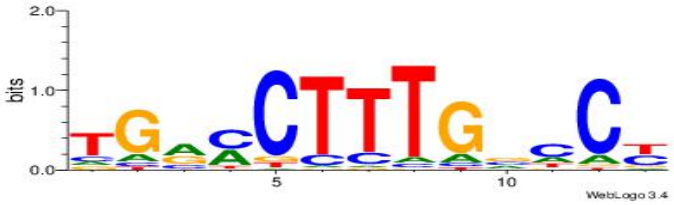
Alignment:

```
-RGGBCAAAGKYCA
AKGYYCAAAGRTCA
```

Original motif Consensus sequence: RGGBCAAAGKYCA



Reverse complement motif Consensus sequence: TGMYCTTTGBCCK



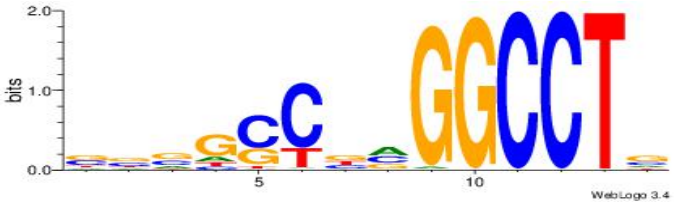
Dataset #:	3
Motif ID:	28

Motif name:	Zfx
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	13
Similarity score:	0.568042

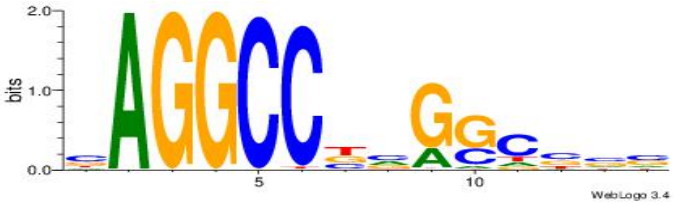
Alignment:

```
BBVGCCBVGGCCTV-
-AKGYYCAAAGRTCA
```

Original motif Consensus sequence: BBVGCCBVGGCCTV



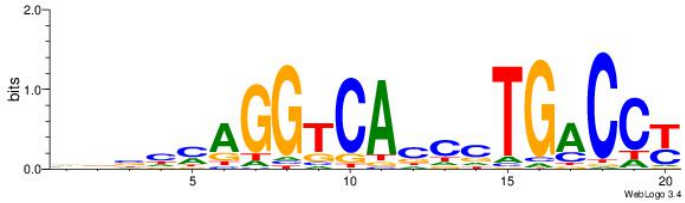
Reverse complement motif Consensus sequence: VAGGCCBBGGCVB



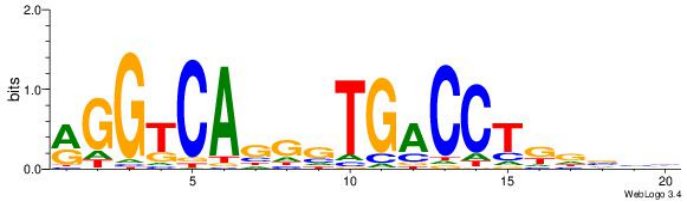
Dataset #:	3
Motif ID:	45
Motif name:	ESR1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8
Number of overlap:	13
Similarity score:	0.569869

Alignment:
VDBHMAGGTCACCCTGACCY-
-------TGAMCTTTGMMCYT

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY



Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV



Dataset #: 3 Motif ID: 39 Motif name: MZF1_1-4

Original motif Consensus sequence: BGGGGA

Reverse complement motif Consensus sequence: TCCCCV

Best Matches for Motif ID 39 (Highest to Lowest)

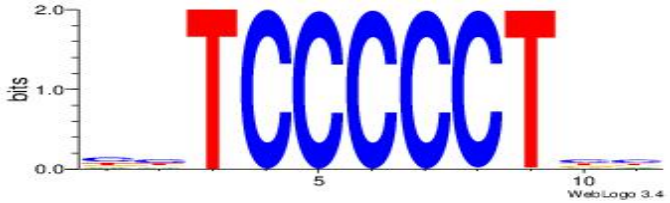
Dataset #:	4
Motif ID:	93
Motif name:	rrAGGGGGArr
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward

Position number: 3
Number of overlap: 6
Similarity score: 0.0136552

Alignment:
VVTCCCCCTVV
--TCCCCV---

Original motif Consensus sequence: VVAGGGGGAVV

Reverse complement motif Consensus sequence: VVTCCCCCTVV

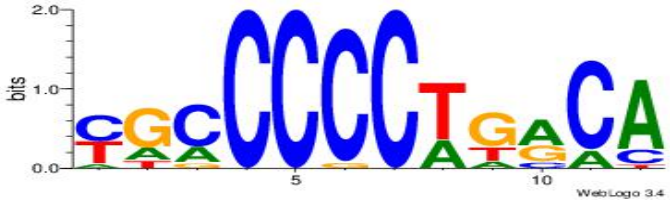


Dataset #: 3
Motif ID: 51
Motif name: INSM1
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 6
Similarity score: 0.0276389

Alignment:
MGCCCCCTGMCA
--TCCCCV----

Original motif Consensus sequence: TGYCAGGGGGCR

Reverse complement motif Consensus sequence: MGCCCCCTGMCA



Dataset #: 3
Motif ID: 57
Motif name: MZF1_5-13
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 2
Number of overlap: 6
Similarity score: 0.0314583

Alignment:
BKAGGGGDAD
---BGGGGA-

Original motif Consensus sequence: BKAGGGGDAD

Reverse complement motif Consensus sequence: BTHCCCCTYB

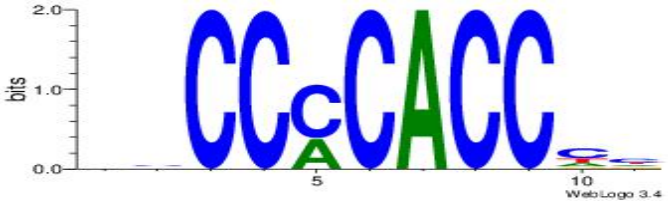
Dataset #: 4

Motif ID:	89
Motif name:	ccCCmCACCcc
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	6
Similarity score:	0.03801

Alignment:

```
HBCCMCACCHH
-TCCCCV----
```

Original motif Consensus sequence: HBCCMCACCHH



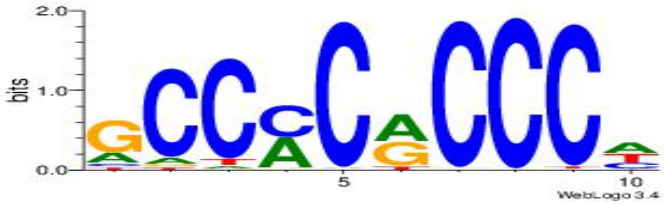
Reverse complement motif Consensus sequence: DDGGTGRGGBD

Dataset #:	3
Motif ID:	52
Motif name:	Klf4
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	6
Similarity score:	0.0406514

Alignment:
GCCYCMCCCD
TCCCCV----

Original motif Consensus sequence: DGGGYGKGGC

Reverse complement motif Consensus sequence: GCCYCMCCCD

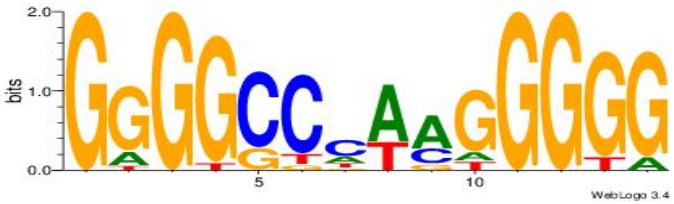


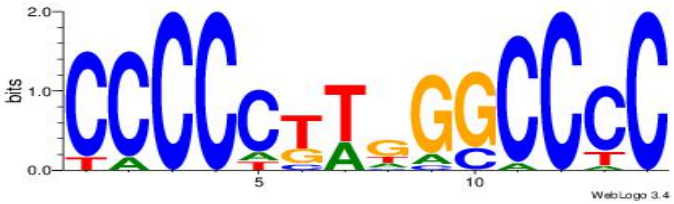
Dataset #:	3
Motif ID:	37
Motif name:	PLAG1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	9
Number of overlap:	6
Similarity score:	0.0412963

Alignment:
GGGGCCCAAGGGGG
--------BGGGGA

Original motif Consensus sequence: GGGGCCCAAGGGGG

Reverse complement motif Consensus sequence: CCCCCTTGGGCCC





Dataset #:	2
Motif ID:	24
Motif name:	Motif 24
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	6
Similarity score:	0.0426517

Alignment:

```
TCCCAG
TCCCCV
```

Original motif Consensus sequence: CTGGGA

Reverse complement motif Consensus sequence: TCCCAG

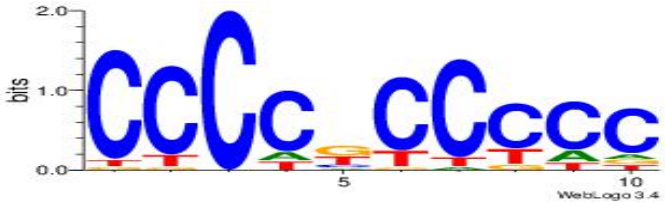
Dataset #:	3
Motif ID:	32

Motif name:	SP1
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	6
Similarity score:	0.0464881

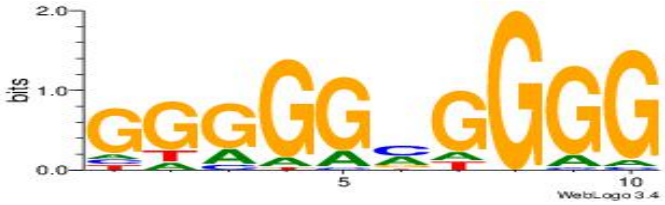
Alignment:

```
GGGGGYGGGG
----BGGGGA
```

Original motif Consensus sequence: CCCCKCCCCC



Reverse complement motif Consensus sequence: GGGGGYGGGG

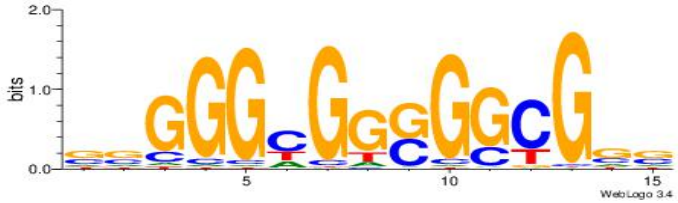


Dataset #:	4
Motif ID:	91
Motif name:	ssCGCCsCCrCCCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	6
Similarity score:	0.047793

Alignment:
SSCGCCSCCGCCCSS
---------TCCCCV

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS

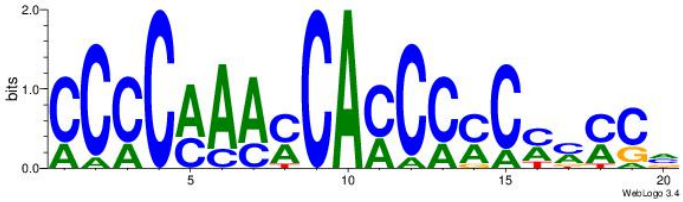


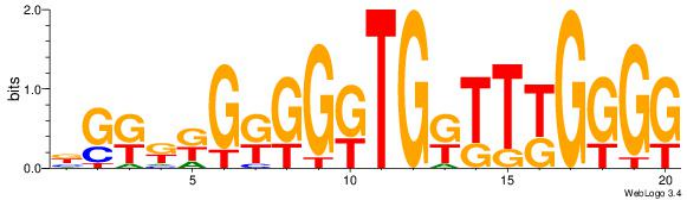
Dataset #:	3
Motif ID:	34
Motif name:	RREB1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	6
Similarity score:	0.0493561

Alignment:
CCCCMAAMCAMCCMCMMMCV
----TCCCCV----------

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV

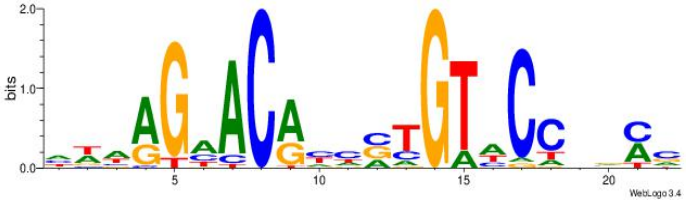
Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG



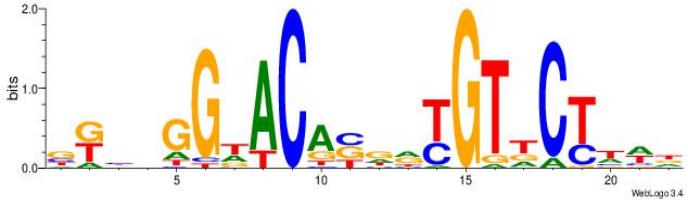


Dataset #: 3 **Motif ID: 40** **Motif name: Ar**

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH



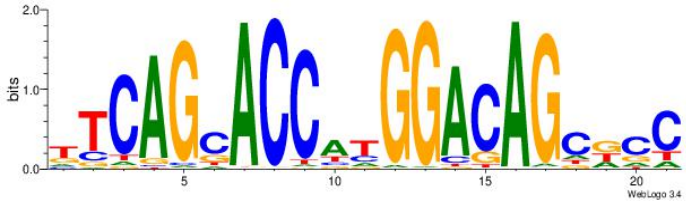
Best Matches for Motif ID 40 (Highest to Lowest)

Dataset #:	3
Motif ID:	35
Motif name:	REST
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	21
Similarity score:	0.0696331

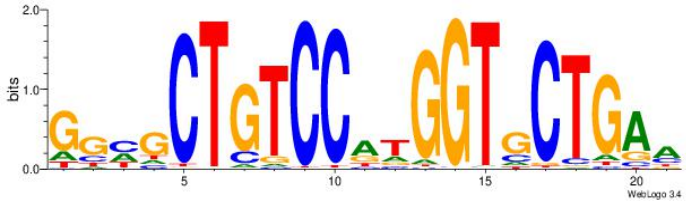
Alignment:

-GGYGCTGTCCATGGTGCTGAA
VRVDGGHACAVDDKGTHCTDWH

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC



Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA

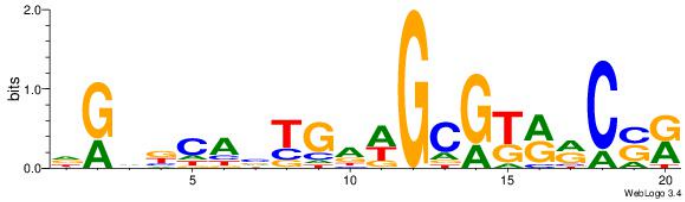


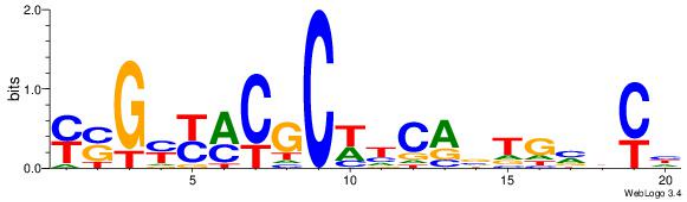
Dataset #:	3
Motif ID:	61
Motif name:	Pax5
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	20
Similarity score:	0.564914

Alignment:
--MSGKKRCGCWDCABTGBBCD
VRVDGGHACAVDDKGTHCTDWH

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR

Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD



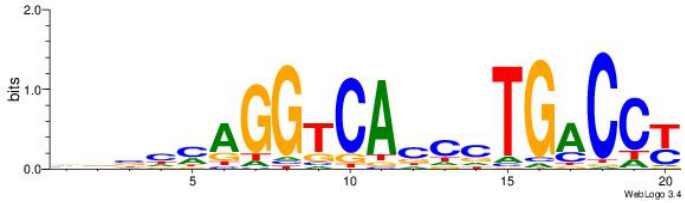


Dataset #:	3
Motif ID:	45
Motif name:	ESR1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	19
Similarity score:	1.05195

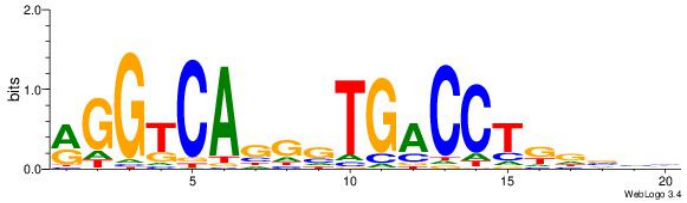
Alignment:

```
VDBHMAGGTCACCCTGACCY---
-VRVDGGHACAVDDKGTHCTDWH
```

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY



Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV



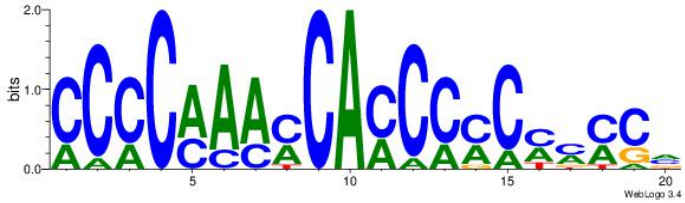
Dataset #:	3

Motif ID:	34
Motif name:	RREB1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	19
Similarity score:	1.07661

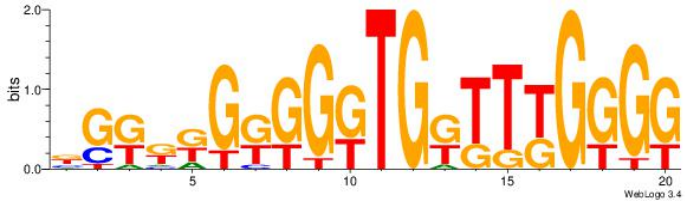
Alignment:

```
CCCCMAAMCAMCCMCMMMCV---
-HWDAGHACRHHVTGTHCCHVMV
```

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG

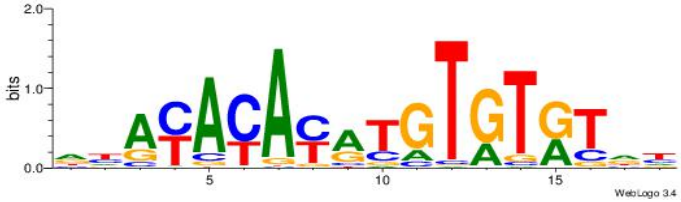


Dataset #:	4
Motif ID:	97
Motif name:	ryayAyAyrtGTRTrTry
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	18

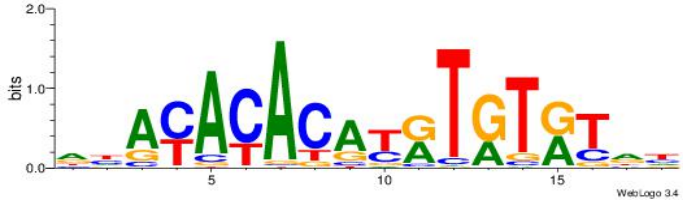
Similarity score: 1.57551

Alignment:
----HDAMACACAKKTKTKTHD
VRVDGGHACAVDDKGTHCTDWH

Original motif Consensus sequence: DHAYAYAYRTGTGTRTDH



Reverse complement motif Consensus sequence: HDAMACACAKKTKTKTHD

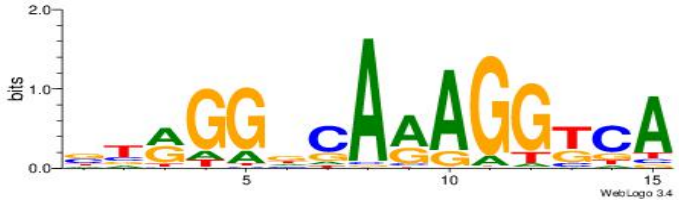


Dataset #: 3
Motif ID: 36
Motif name: PPARGRXRA
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 1
Number of overlap: 15
Similarity score: 3.0649

Alignment:
-------BTRGGDCARAGGKCA
VRVDGGHACAVDDKGTHCTDWH

Original motif Consensus sequence: BTRGGDCARAGGKCA

Reverse complement motif Consensus sequence: TGRCCTKTGHCCK

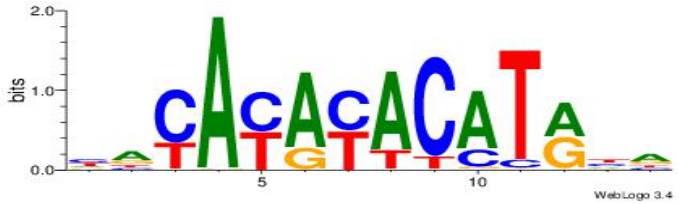


Dataset #:	4
Motif ID:	75
Motif name:	yayAyAyACATrya
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	3.56216

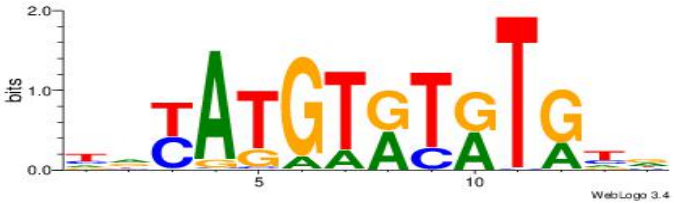
Alignment:

```
HACAYAYACATRHD--------
VRVDGGHACAVDDKGTHCTDWH
```

Original motif Consensus sequence: HACAYAYACATRHD



Reverse complement motif Consensus sequence: DHKATGTKTKTGT



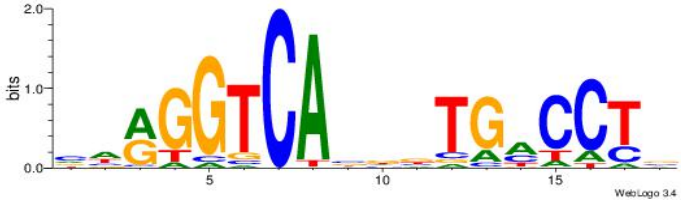
Dataset #:	3
Motif ID:	46

Motif name:	ESR2
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	14
Similarity score:	3.57597

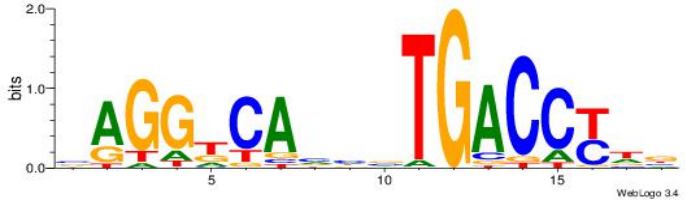
Alignment:

```
--------VHRGGTCABDBTGMCCTB
VRVDGGHACAVDDKGTHCTDWH----
```

Original motif Consensus sequence: VHRGGTCABDBTGMCCTB



Reverse complement motif Consensus sequence: BAGGYCABHBTGACCKHV

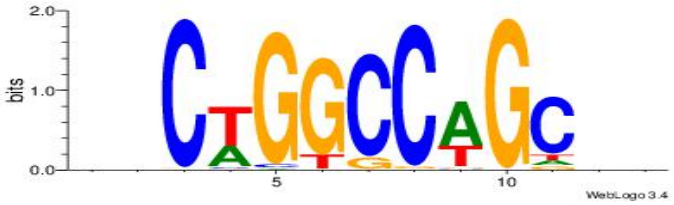


Dataset #:	4
Motif ID:	80
Motif name:	ssCwGGCCwGCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	13
Similarity score:	4.06081

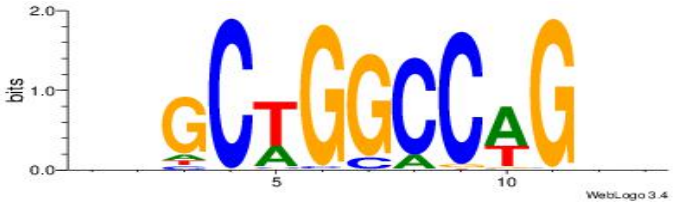
Alignment:

```
---------BBCWGGCCAGCBB
HWDAGHACRHHVTGTHCCHVMV
```

Original motif Consensus sequence: BBCWGGCCAGCBB



Reverse complement motif Consensus sequence: BBGCTGGCCWGBI



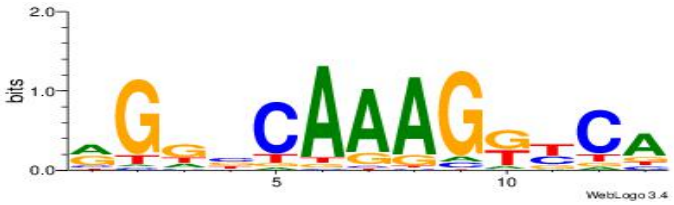
Dataset #:	3
Motif ID:	50
Motif name:	HNF4A
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	13
Similarity score:	4.07506

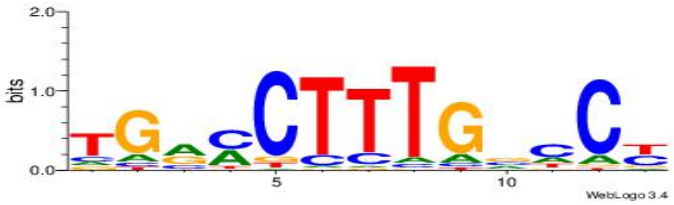
Alignment:

```
---------TGMYCTTTGBCCK
HWDAGHACRHHVTGTHCCHVMV
```

Original motif Consensus sequence: RGGBCAAAGKYCA

Reverse complement motif Consensus sequence: TGMYCTTTGBCCK





Dataset #: 3 **Motif ID: 41** **Motif name: Arnt**

Original motif Consensus sequence: CACGTG

Reverse complement motif Consensus sequence: CACGTG

Best Matches for Motif ID 41 (Highest to Lowest)

Dataset #:	3
Motif ID:	47
Motif name:	Esrrb
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

Alignment:

```
CACGTG
CACGTG
```

Original motif Consensus sequence: CACGTG

Reverse complement motif Consensus sequence: CACGTG

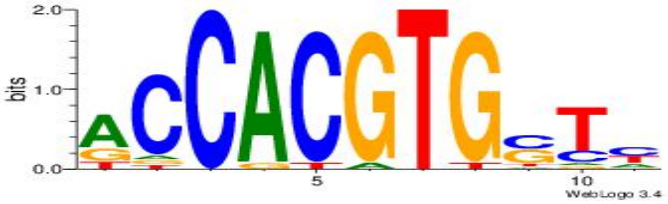
Dataset #:	3
Motif ID:	55
Motif name:	MYCMAX
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	6
Similarity score:	0.0143849

Alignment:

```
RASCACGTGGT
---CACGTG--
```

Original motif Consensus sequence: RASCACGTGGT

Reverse complement motif Consensus sequence: ACCACGTGSTM

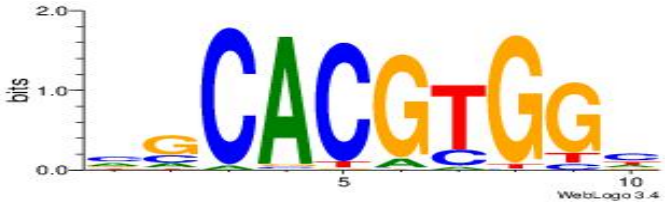


Dataset #:	3
Motif ID:	54
Motif name:	Myc
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	6
Similarity score:	0.0267529

Alignment:

```
VGCACGTGGH
--CACGTG--
```

Original motif Consensus sequence: VGCACGTGGH



Reverse complement motif Consensus sequence: DCCACGTGCV

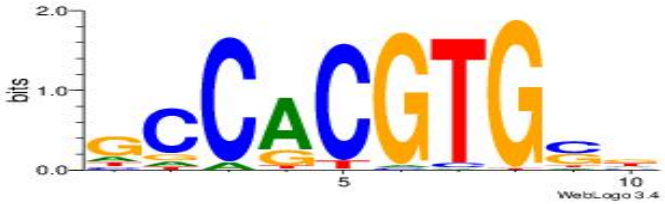
Dataset #:	3
Motif ID:	56
Motif name:	Mycn
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	6

Similarity score: 0.0272641

Alignment:
HSCACGTGGC
--CACGTG--

Original motif Consensus sequence: HSCACGTGGC

Reverse complement motif Consensus sequence: GCCACGTGSD



Dataset #: 3
Motif ID: 49
Motif name: HIF1AARNT
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: 0.0347756

Alignment:
VCACGTBV
-CACGTG-

Original motif Consensus sequence: VBACGTGV

Reverse complement motif Consensus sequence: VCACGTBV

Dataset #:	3
Motif ID:	42
Motif name:	ArntAhr
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:	0.065625

Alignment:
YGCGTG
CACGTG

Original motif Consensus sequence: YGCGTG

Reverse complement motif Consensus sequence: CACGCM

Dataset #:	3
Motif ID:	30

Motif name:	ZEB1
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:	0.0689533

Alignment:

HAGGTG
CACGTG

Original motif Consensus sequence: CACCTD

Reverse complement motif Consensus sequence: HAGGTG

Dataset #:	3
Motif ID:	44
Motif name:	Egr1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	6
Similarity score:	0.0784722

Alignment:
HGCGTGGGCGK
CACGTG-----

Original motif Consensus sequence: HGCGTGGGCGK

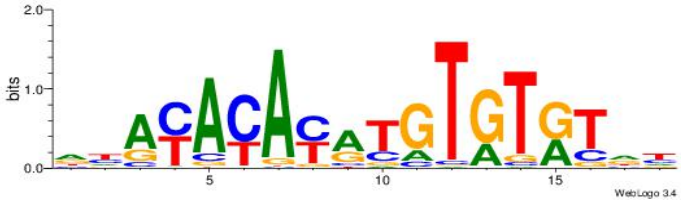
Reverse complement motif Consensus sequence: YCGCCCACGCH

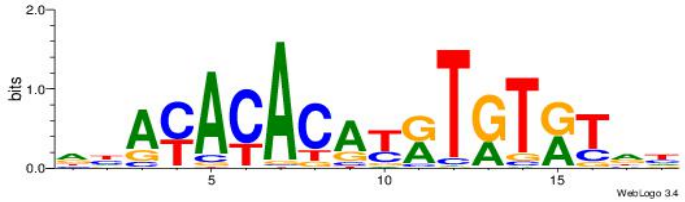
Dataset #:	4
Motif ID:	97
Motif name:	ryayAyAyrtGTRTrTry
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	6
Similarity score:	0.0849165

Alignment:
DHAYAYAYRTGTGTRTDH
-----CACGTG-------

Original motif Consensus sequence: DHAYAYAYRTGTGTRTDH

Reverse complement motif Consensus sequence: HDAMACACAKKTKTKTHD



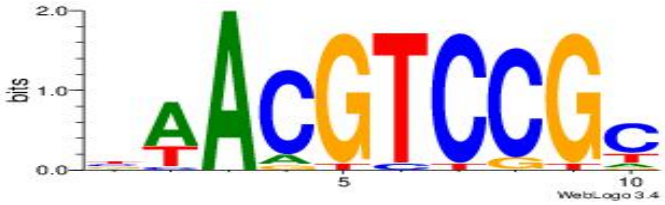


Dataset #:	3
Motif ID:	53
Motif name:	MIZF
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	6
Similarity score:	0.0854167

Alignment:

```
BAACGTCCGC
-CACGTG---
```

Original motif Consensus sequence: BAACGTCCGC



Reverse complement motif Consensus sequence: GCGGACGTTV

Dataset #: 3 Motif ID: 42 Motif name: ArntAhr

Original motif Consensus sequence: YGCGTG

Reverse complement motif Consensus sequence: CACGCM

Best Matches for Motif ID 42 (Highest to Lowest)

Dataset #:	3
Motif ID:	44
Motif name:	Egr1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	6
Similarity score:	0.00801749

Alignment:

```
HGCGTGGGCGK
YGCGTG-----
```

Original motif Consensus sequence: HGCGTGGGCGK

Reverse complement motif Consensus sequence: YCGCCCACGCH

Dataset #:	3
Motif ID:	49
Motif name:	HIF1AARNT
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	6
Similarity score:	0.0192621

Alignment:

```
VBACGTGV
-YGCGTG-
```

Original motif Consensus sequence: VBACGTGV

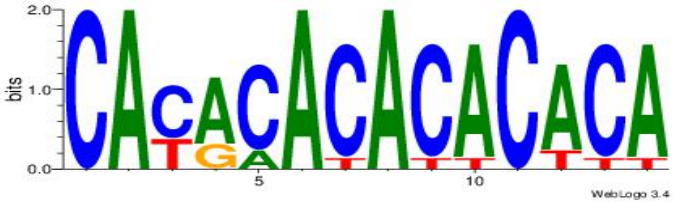
Reverse complement motif Consensus sequence: VCACGTBV

Dataset #:	2
Motif ID:	27
Motif name:	Motif 27
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	6

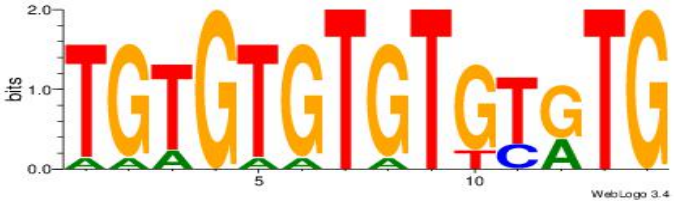
Similarity score: 0.0388571

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

Original motif Consensus sequence: CAYACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTKT



Dataset #: 3
Motif ID: 47
Motif name: Esrrb
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: 0.0396147

Alignment:
CACGTG
YGCGTG

Original motif Consensus sequence: CACGTG

Reverse complement motif Consensus sequence: CACGTG

Dataset #:	3
Motif ID:	41
Motif name:	Arnt
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:	0.0396147

Alignment:

```
CACGTG
YGCGTG
```

Original motif Consensus sequence: CACGTG

Reverse complement motif Consensus sequence: CACGTG

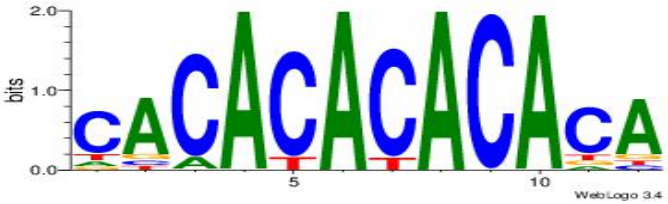
Dataset #:	4
Motif ID:	79

Motif name:	CACACACACACA
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	6
Similarity score:	0.0420782

Alignment:

```
TGTGTGTGTGTG
YGCGTG------
```

Original motif Consensus sequence: CACACACACACA



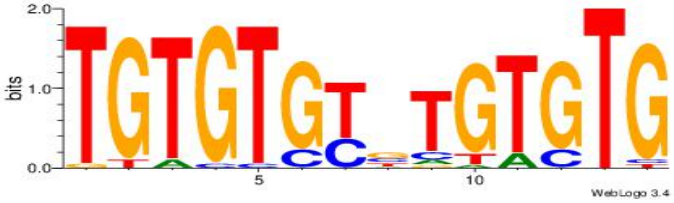
Reverse complement motif Consensus sequence: TGTGTGTGTGTG

Dataset #:	2
Motif ID:	25
Motif name:	Motif 25
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	9
Number of overlap:	6
Similarity score:	0.0430749

Alignment:
CACACAVRCACACA
--------CACGCM

Original motif Consensus sequence: CACACAVRCACACA

Reverse complement motif Consensus sequence: TGTGTGKVTGTGT

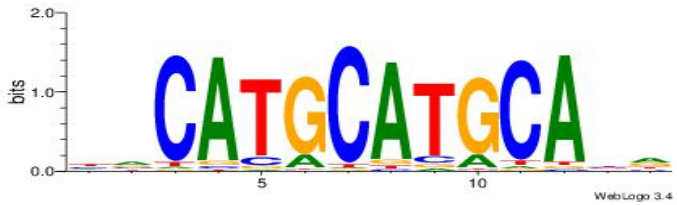


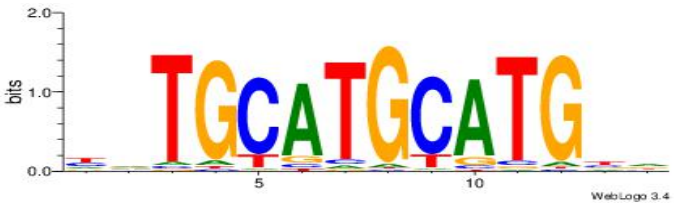
Dataset #:	4
Motif ID:	101
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	6
Similarity score:	0.043218

Alignment:
HVCATGCATGCABD
--CACGCM------

Original motif Consensus sequence: HVCATGCATGCABD

Reverse complement motif Consensus sequence: DVTGCATGCATGB



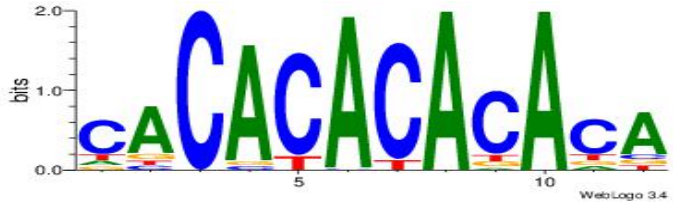


Dataset #:	4
Motif ID:	95
Motif name:	CACACACACACA
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	6
Similarity score:	0.0440329

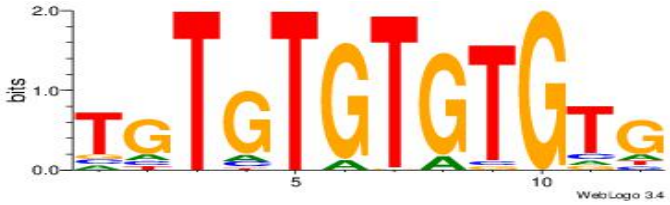
Alignment:

```
TGTGTGTGTGTG
----YGCGTG--
```

Original motif Consensus sequence: CACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTG



Dataset #:	3
Motif ID:	55

Motif name:	MYCMAX
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	6
Similarity score:	0.0456663

Alignment:

```
RASCACGTGGT
---YGCGTG--
```

Original motif Consensus sequence: RASCACGTGGT

Reverse complement motif Consensus sequence: ACCACGTGSTM

Dataset #: 3 Motif ID: 43 Motif name: E2F1

Original motif Consensus sequence: TTTSGCGC

Reverse complement motif Consensus sequence: GCGCSAAA

Best Matches for Motif ID 43 (Highest to Lowest)

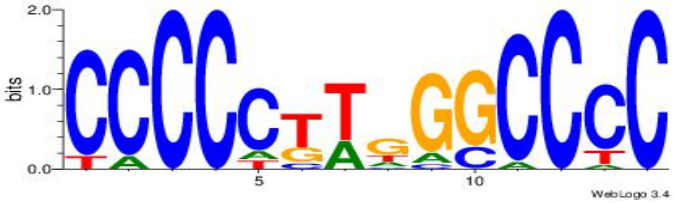
Dataset #:	3
Motif ID:	37
Motif name:	PLAG1
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	8
Similarity score:	0.0610174

Alignment:

```
CCCCCTTGGGCCCC
-TTTSGCGC-----
```

Original motif Consensus sequence: GGGGCCCAAGGGGG

Reverse complement motif Consensus sequence: CCCCCTTGGGCCC

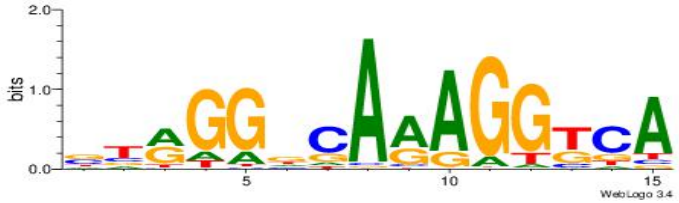


Dataset #:	3
Motif ID:	36
Motif name:	PPARGRXRA
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	8

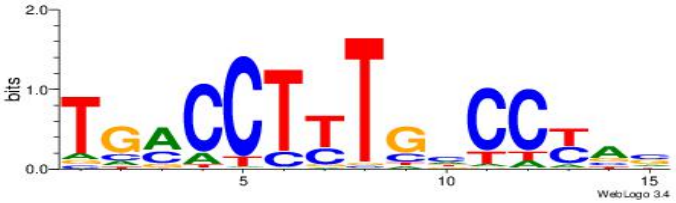
Similarity score: 0.0634966

Alignment:
TGRCCTKTGHCCKAB
--TTTSGCGC-----

Original motif Consensus sequence: BTRGGDCARAGGKCA



Reverse complement motif Consensus sequence: TGRCCTKTGHCCK

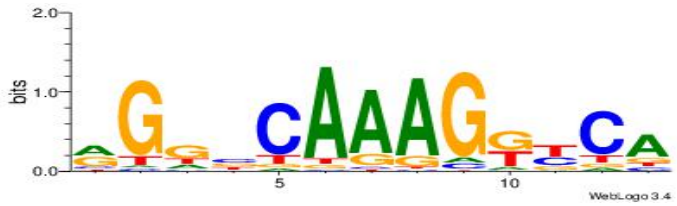


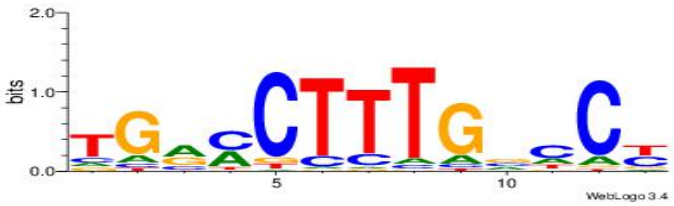
Dataset #: 3
Motif ID: 50
Motif name: HNF4A
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 8
Similarity score: 0.0638262

Alignment:
RGGBCAAAGKYCA
GCGCSAAA-----

Original motif Consensus sequence: RGGBCAAAGKYCA

Reverse complement motif Consensus sequence: TGMYCTTTGBCCK



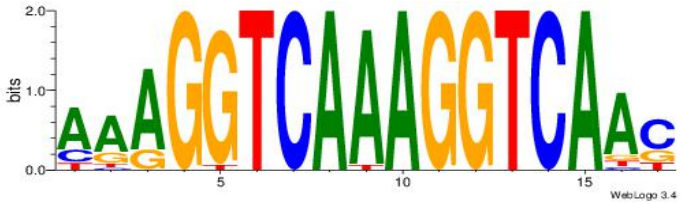


Dataset #:	3
Motif ID:	59
Motif name:	NR1H2RXRA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	8
Similarity score:	0.0652535

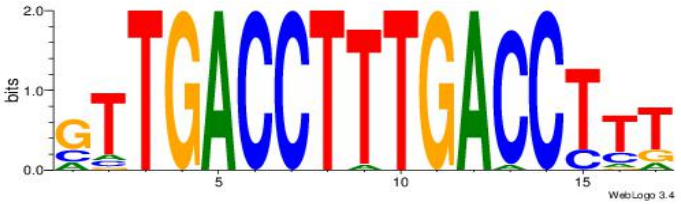
Alignment:

```
AAAGGTCAAAGGTCAAC
--GCGCSAAA-------
```

Original motif Consensus sequence: AAAGGTCAAAGGTCAAC



Reverse complement motif Consensus sequence: GTTGACCTTTGACCTTT



Dataset #:	3

Motif ID:	38
Motif name:	NR2F1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	8
Similarity score:	0.0723689

Alignment:

```
TGAMCTTTGMMCYT
-----TTTSGCGC-
```

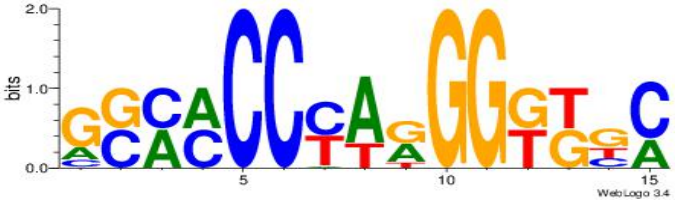
Original motif Consensus sequence: TGAMCTTTGMMCYT

Reverse complement motif Consensus sequence: AKGYYCAAAGRTCA

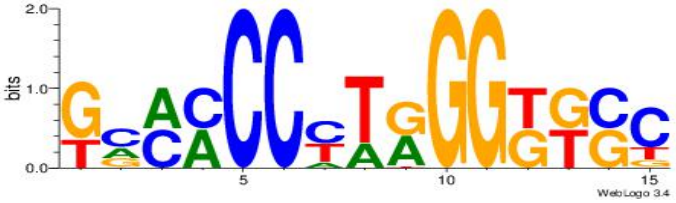
Dataset #:	3
Motif ID:	29
Motif name:	Zfp423
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	7
Number of overlap:	8
Similarity score:	0.0778103

Alignment:
GSMMCCYARGGKKKC
------GCGCSAAA-

Original motif Consensus sequence: GSMMCCYARGGKKKC



Reverse complement motif Consensus sequence: GYRYCCMTKGGYR

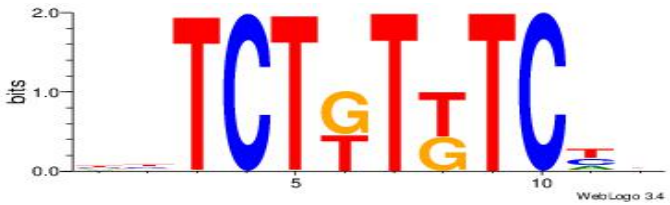


Dataset #:	4
Motif ID:	92
Motif name:	tyTCTkTkTCyy
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	8
Similarity score:	0.0785178

Alignment:
BBTCTKTKTCHB
----TTTSGCGC

Original motif Consensus sequence: BBTCTKTKTCHB

Reverse complement motif Consensus sequence: VHGARAYAGAVV

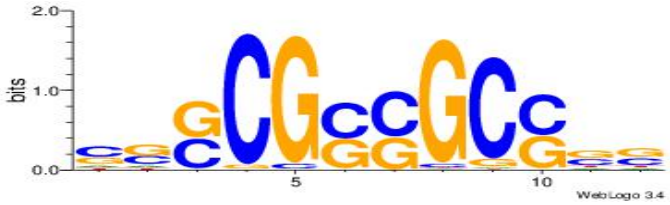


Dataset #:	4
Motif ID:	78
Motif name:	sssCGssGCsss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	8
Similarity score:	0.078631

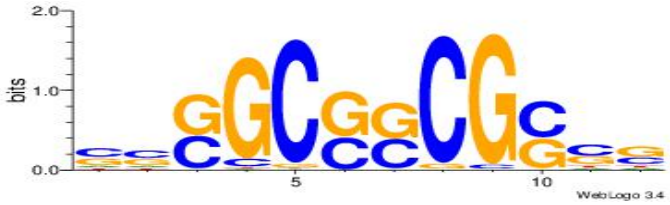
Alignment:

```
SSSGCSSCGSSS
--TTTSGCGC--
```

Original motif Consensus sequence: SSSCGSSGCSSS



Reverse complement motif Consensus sequence: SSSGCSSCGSSS



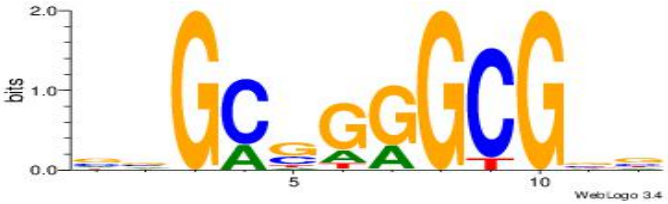
Dataset #:	4
Motif ID:	67

Motif name:	ssGMsGRGCGss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	8
Similarity score:	0.0796616

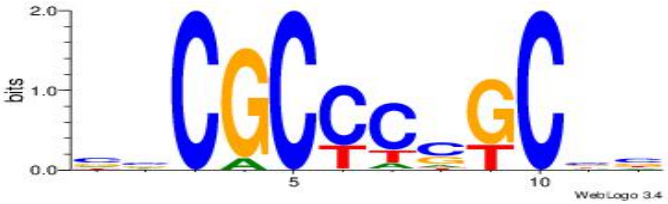
Alignment:

```
BBCGCCCSGCVV
-GCGCSAAA---
```

Original motif Consensus sequence: VVGCSGGGCGBB



Reverse complement motif Consensus sequence: BBCGCCCSGCVV

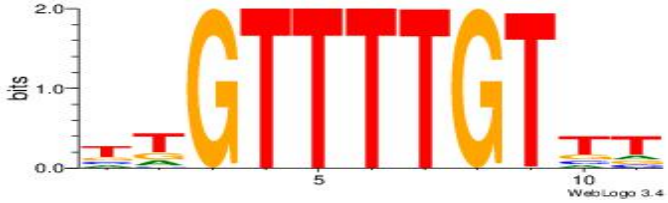


Dataset #:	4
Motif ID:	69
Motif name:	aaACAAAACaa
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.0816948

Alignment:
AAACAAAACAA
GCGCSAAA---

Original motif Consensus sequence: AAACAAAACAA

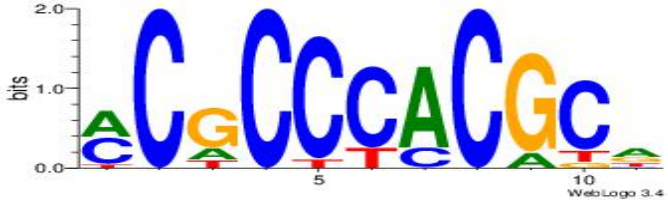
Reverse complement motif Consensus sequence: TTGTTTTGTTT



Dataset #: 3 Motif ID: 44 Motif name: Egr1

Original motif Consensus sequence: HGCGTGGGCGK

Reverse complement motif Consensus sequence: YCGCCCACGCH



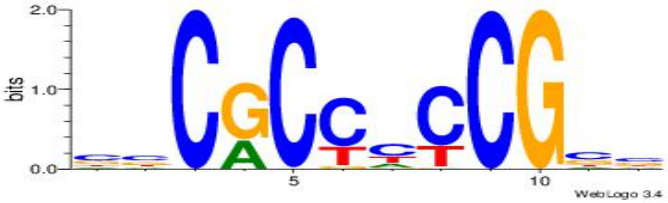
Best Matches for Motif ID 44 (Highest to Lowest)

Dataset #:	4
Motif ID:	88
Motif name:	ssCrCYyYCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1

Number of overlap: 11
Similarity score: 0.0247041

Alignment:
BBCGGKGGMGBB
HGCGTGGGCGK-

Original motif Consensus sequence: BBCRCCYCCGBB



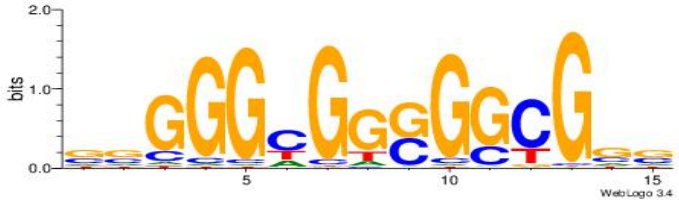
Reverse complement motif Consensus sequence: BBCGGKGGMGBB

Dataset #: 4
Motif ID: 91
Motif name: ssCGCCsCCrCCCss
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: 0.0409098

Alignment:
SSCGCCSCCGCCCSS
-YCGCCCACGCH---

Original motif Consensus sequence: SSCGCCSCCGCCCSS

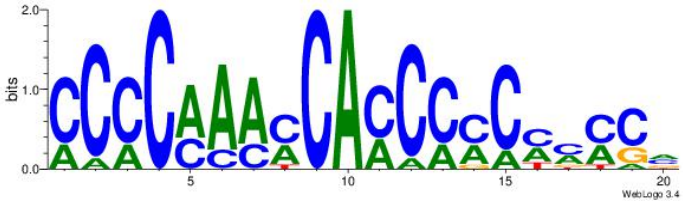
Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS



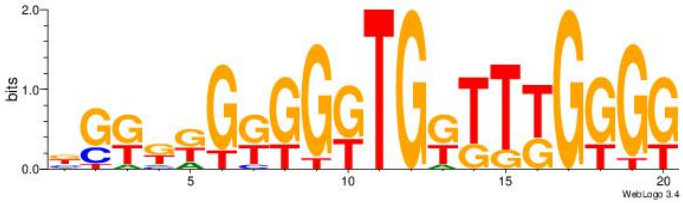
Dataset #: 3
Motif ID: 34
Motif name: RREB1
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 3
Number of overlap: 11
Similarity score: 0.0550907

Alignment:
BGRRRGRGGRTGRTTYGGGG
-------HGCGTGGGCGK--

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



Reverse complement motif Consensus sequence:
BGRRRGRGGRTGRTTYGGGG



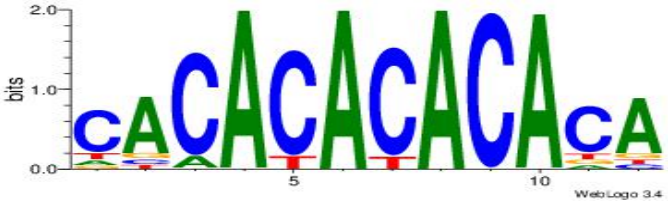
Dataset #: 4

Motif ID:	79
Motif name:	CACACACACACA
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0597938

Alignment:

```
TGTGTGTGTGTG
HGCGTGGGCGK-
```

Original motif Consensus sequence: CACACACACACA

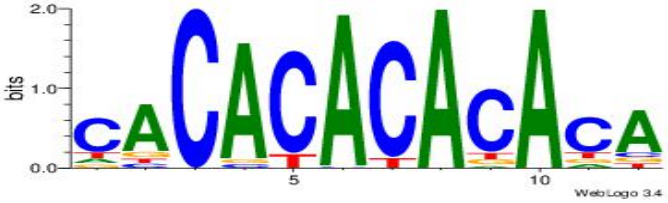


Reverse complement motif Consensus sequence: TGTGTGTGTGTG

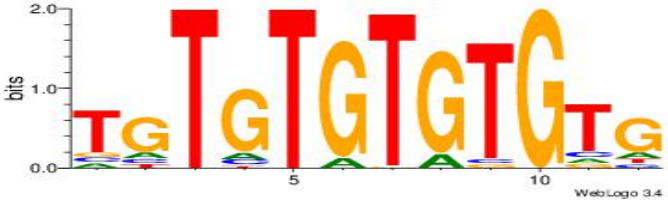
Dataset #:	4
Motif ID:	95
Motif name:	CACACACACACA
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0606494

Alignment:
TGTGTGTGTGTG
HGCGTGGGCGK-

Original motif Consensus sequence: CACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTG

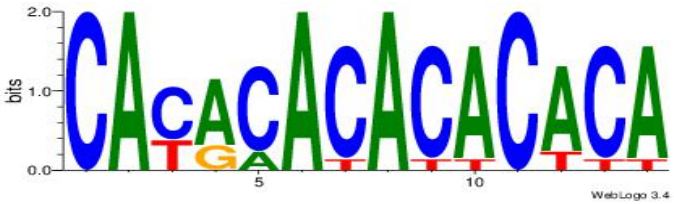


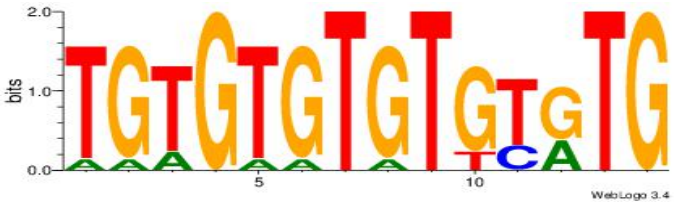
Dataset #:	2
Motif ID:	27
Motif name:	Motif 27
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.062391

Alignment:
CAYACACACACACA
YCGCCCACGCH---

Original motif Consensus sequence: CAYACACACACACA

Reverse complement motif Consensus sequence: TGTGTGTGTGTKT



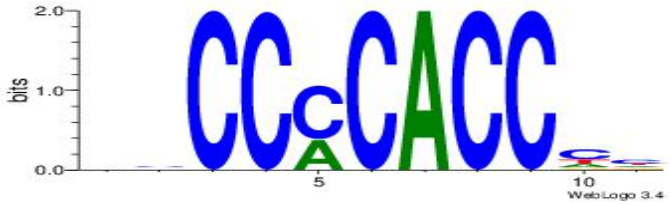


Dataset #:	4
Motif ID:	89
Motif name:	ccCCmCACCcc
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.0639546

Alignment:

```
HBCCMCACCHH
YCGCCCACGCH
```

Original motif Consensus sequence: HBCCMCACCHH



Reverse complement motif Consensus sequence: DDGGTGRGGBD

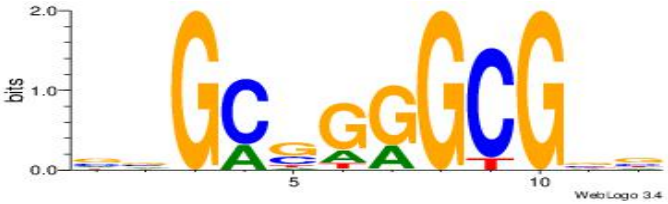
Dataset #:	4
Motif ID:	67

Motif name:	ssGMsGRGCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0665456

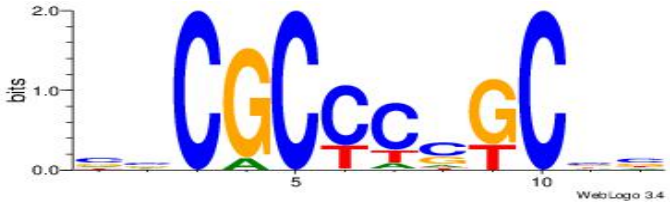
Alignment:

```
VVGCSGGGCGBB
HGCGTGGGCGK-
```

Original motif Consensus sequence: VVGCSGGGCGBB



Reverse complement motif Consensus sequence: BBCGCCCSGCVV

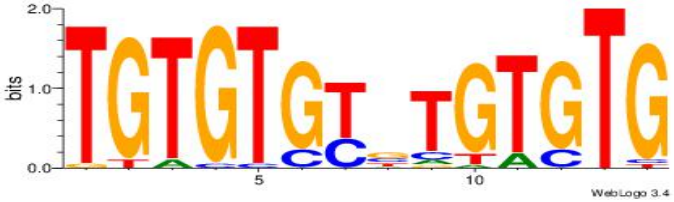


Dataset #:	2
Motif ID:	25
Motif name:	Motif 25
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0668604

Alignment:
CACACAVRCACACA
YCGCCCACGCH---

Original motif Consensus sequence: CACACAVRCACACA

Reverse complement motif Consensus sequence: TGTGTGKVTGTGT

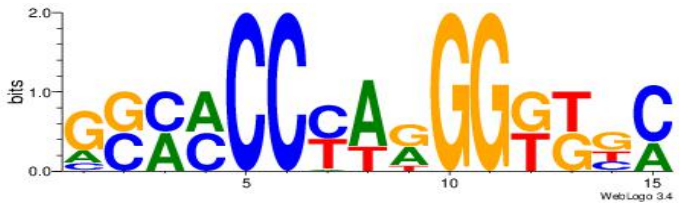


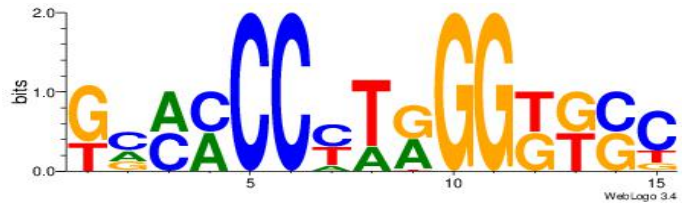
Dataset #:	3
Motif ID:	29
Motif name:	Zfp423
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	11
Similarity score:	0.0673496

Alignment:
GSMMCCYARGGKKKC
---YCGCCCACGCH-

Original motif Consensus sequence: GSMMCCYARGGKKKC

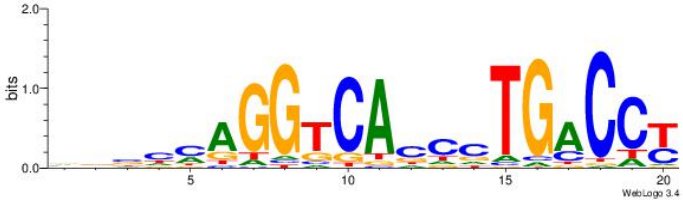
Reverse complement motif Consensus sequence: GYRYCCMTKGGYR



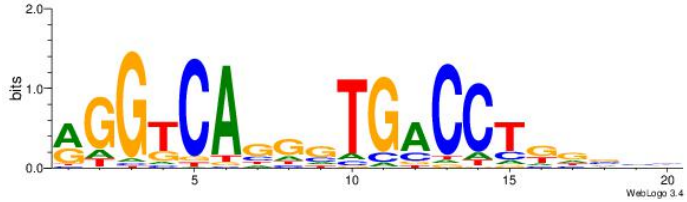


Dataset #: 3 **Motif ID: 45** **Motif name: ESR1**

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY



Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV



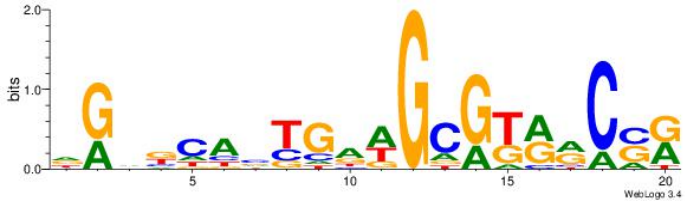
Best Matches for Motif ID 45 (Highest to Lowest)

Dataset #:	3
Motif ID:	61
Motif name:	Pax5
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	20
Similarity score:	0.0624908

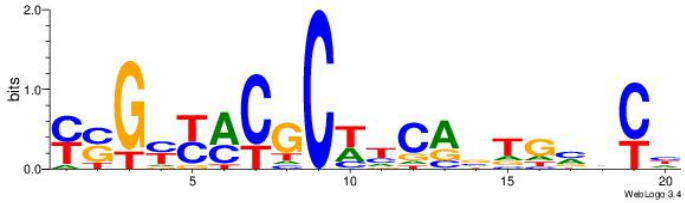
Alignment:

MSGKKRCGCWDCABTGBBCD
MGGTCAGGGTGACCTRDBHV

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR



Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD

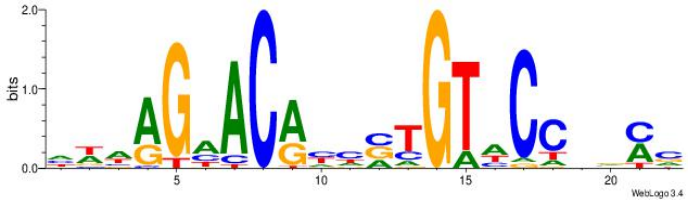


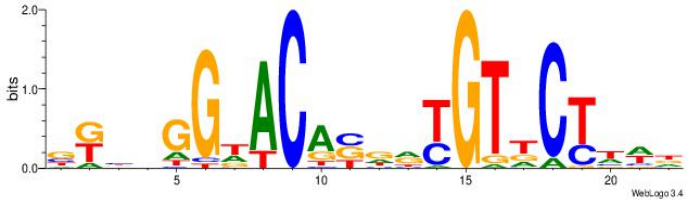
Dataset #:	3
Motif ID:	40
Motif name:	Ar
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	19
Similarity score:	0.556363

Alignment:
-HWDAGHACRHHVTGTHCCHVMV
MGGTCAGGGTGACCTRDBHV---

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV

Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH

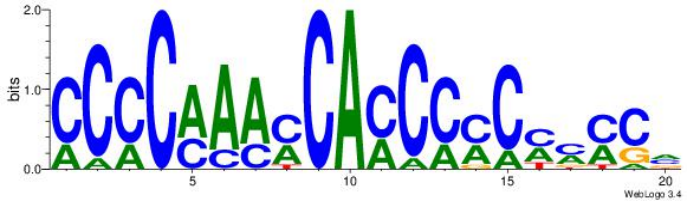




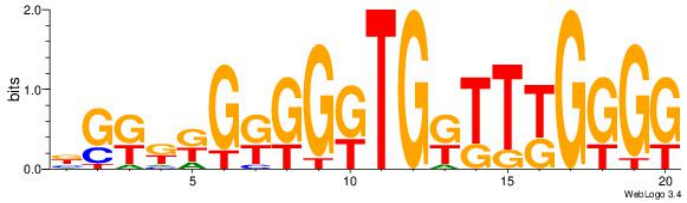
Dataset #:	3
Motif ID:	34
Motif name:	RREB1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	19
Similarity score:	0.575732

Alignment:
BGRRRGRGGRTGRTTYGGGG-
-MGGTCAGGGTGACCTRDBHV

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



Reverse complement motif Consensus sequence:
BGRRRGRGGRTGRTTYGGGG



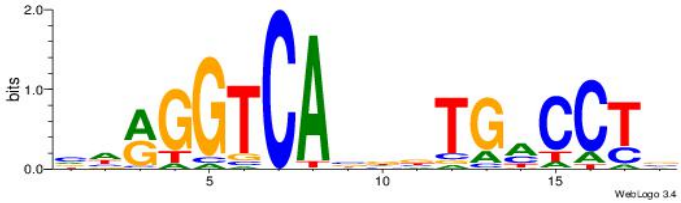
Dataset #:	3

Motif ID:	46
Motif name:	ESR2
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	17
Similarity score:	1.50287

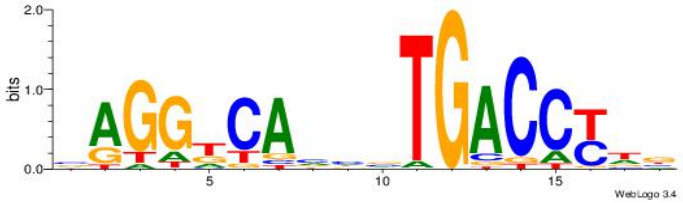
Alignment:

```
---VHRGGTCABDBTGMCCTB
VDBHMAGGTCACCCTGACCY-
```

Original motif Consensus sequence: VHRGGTCABDBTGMCCTB



Reverse complement motif Consensus sequence: BAGGYCABHBTGACCKHV

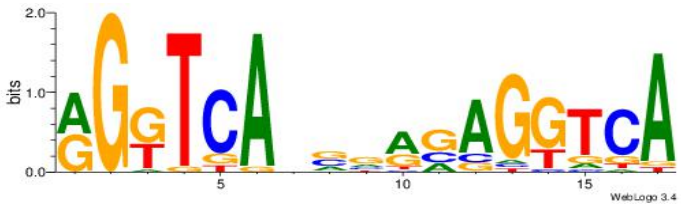


Dataset #:	3
Motif ID:	63
Motif name:	RXRRAR_DR5
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	17

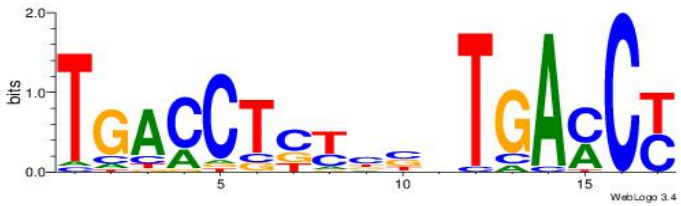
Similarity score: 1.55839

Alignment:
```
---TGACCTCKVVBTGAYCK
VDBHMAGGTCACCCTGACCY
```

Original motif Consensus sequence: RGKTCABVVRGAGGTCA



Reverse complement motif Consensus sequence: TGACCTCKVVBTGAYCK

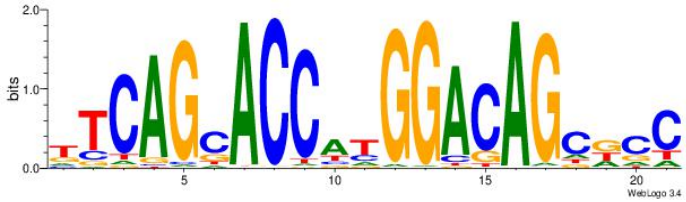


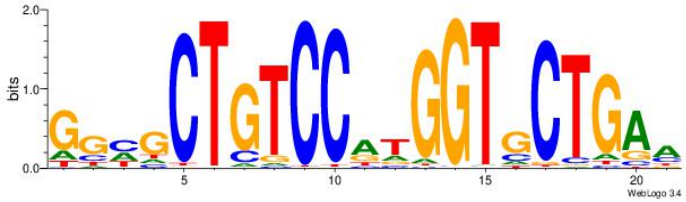
Dataset #:	3
Motif ID:	35
Motif name:	REST
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	16
Similarity score:	2.07409

Alignment:
```
TTCAGCACCATGGACAGCKCC----
-----VDBHMAGGTCACCCTGACCY
```

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC

Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA





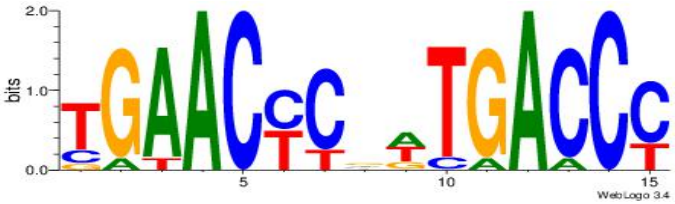
Dataset #:	3
Motif ID:	33
Motif name:	RXRAVDR
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	15
Similarity score:	2.56536

Alignment:

```
-----GGGTCAWBGRGTTCA
MGGTCAGGGTGACCTRDBHV
```

Original motif Consensus sequence: GGGTCAWBGRGTTCA

Reverse complement motif Consensus sequence: TGAACKCBWTGAC



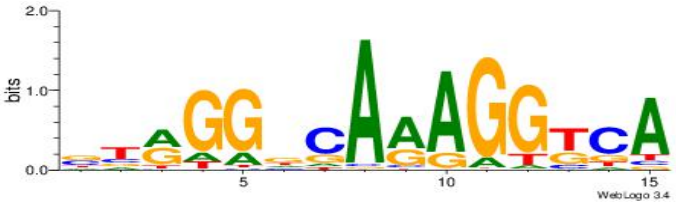
Dataset #:	3
Motif ID:	36

Motif name:	PPARGRXRA
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	3.07055

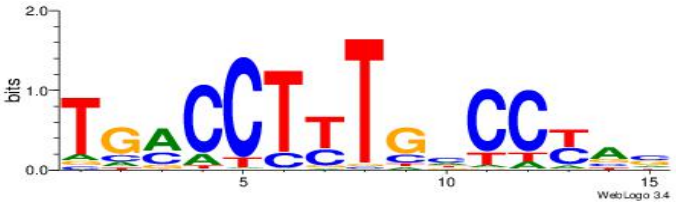
Alignment:

```
------TGRCCTKTGHCCKAB
VDBHMAGGTCACCCTGACCY-
```

Original motif Consensus sequence: BTRGGDCARAGGKCA



Reverse complement motif Consensus sequence: TGRCCTKTGHCCK

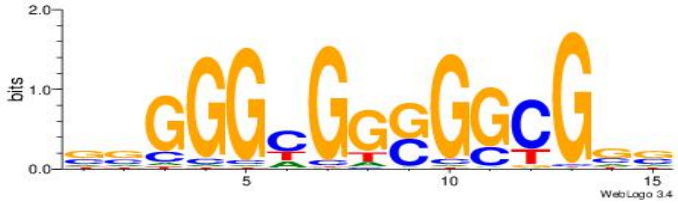


Dataset #:	4
Motif ID:	91
Motif name:	ssCGCCsCCrCCCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	14
Similarity score:	3.07869

Alignment:
SSGGGCGGSGGCGSS------
-VDBHMAGGTCACCCTGACCY

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS

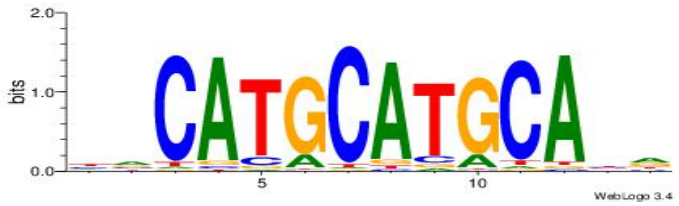


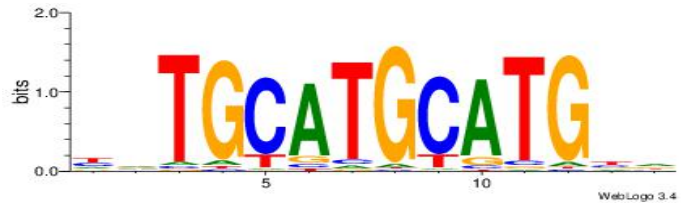
Dataset #:	4
Motif ID:	101
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	3.08388

Alignment:
------HVCATGCATGCABD
MGGTCAGGGTGACCTRDBHV

Original motif Consensus sequence: HVCATGCATGCABD

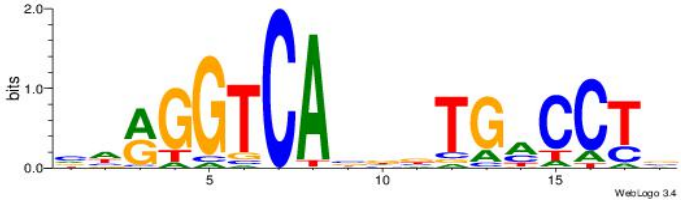
Reverse complement motif Consensus sequence: DVTGCATGCATGB



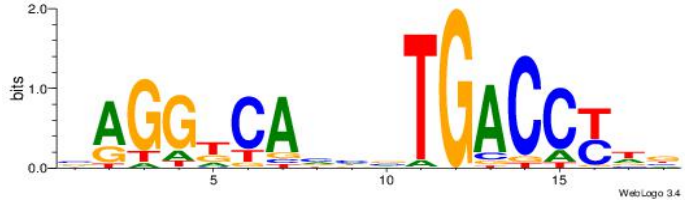


Dataset #: 3 Motif ID: 46 Motif name: ESR2

Original motif Consensus sequence: VHRGGTCABDBTGMCCTB



Reverse complement motif Consensus sequence: BAGGYCABHBTGACCKHV



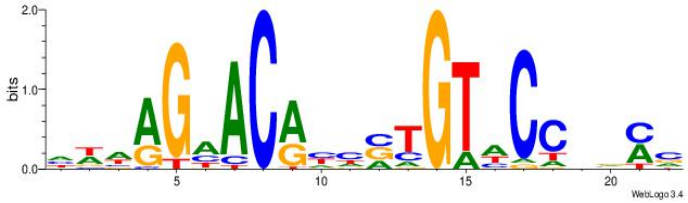
Best Matches for Motif ID 46 (Highest to Lowest)

Dataset #:	3
Motif ID:	40
Motif name:	Ar
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	18
Similarity score:	0.0488603

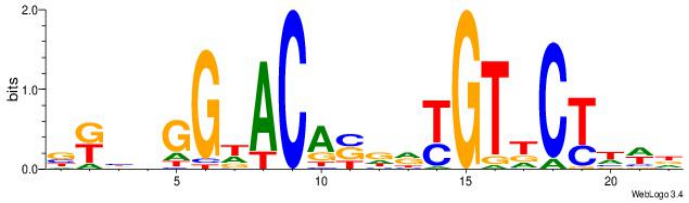
Alignment:

HWDAGHACRHHVTGTHCCHVMV
--BAGGYCABHBTGACCKHV--

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH

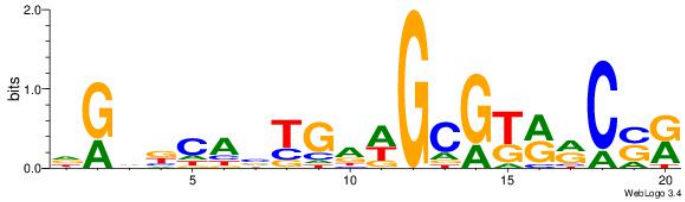


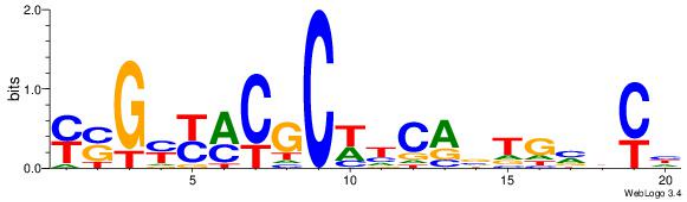
Dataset #:	3
Motif ID:	61
Motif name:	Pax5
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	18
Similarity score:	0.0851144

Alignment:
MSGKKRCGCWDCABTGBBCD
BAGGYCABHBTGACCKHV--

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR

Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD

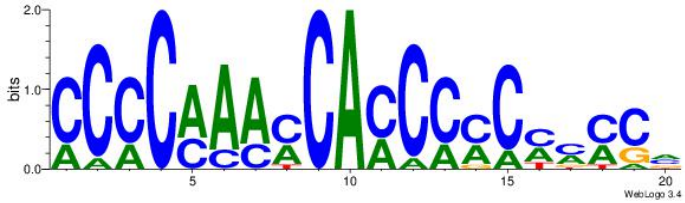




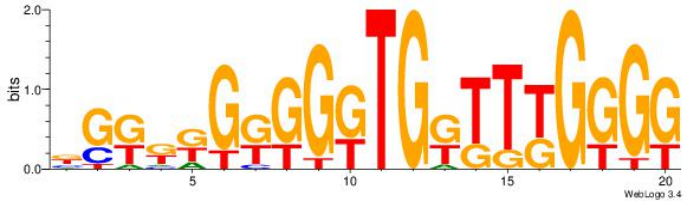
Dataset #:	3
Motif ID:	34
Motif name:	RREB1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	18
Similarity score:	0.0903249

Alignment:
BGRRRGRGGRTGRTTYGGGG
BAGGYCABHBTGACCKHV--

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG



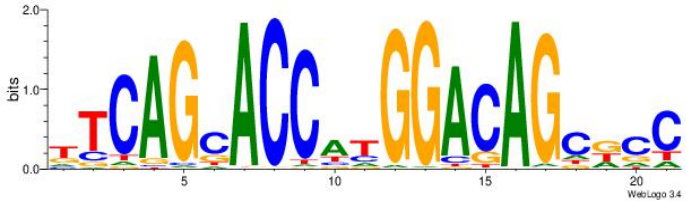
Dataset #:	3

Motif ID:	35
Motif name:	REST
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	18
Similarity score:	0.0916961

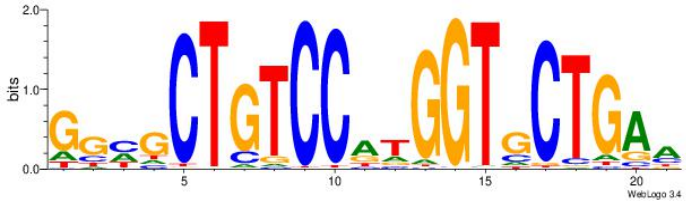
Alignment:

```
GGYGCTGTCCATGGTGCTGAA
-VHRGGTCABDBTGMCCTB--
```

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC



Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA

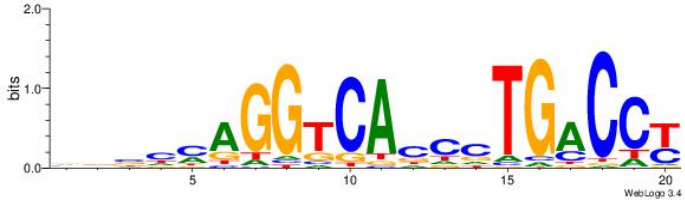


Dataset #:	3
Motif ID:	45
Motif name:	ESR1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	17

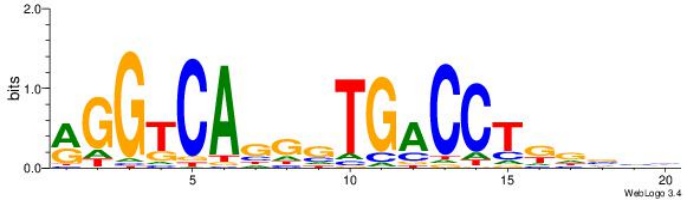
Similarity score: 0.511812

Alignment:
VDBHMAGGTCACCCTGACCY-
---VHRGGTCABDBTGMCCTB

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY



Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV

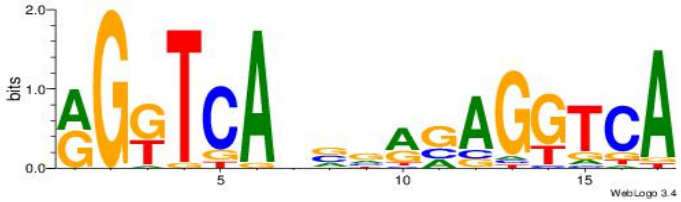


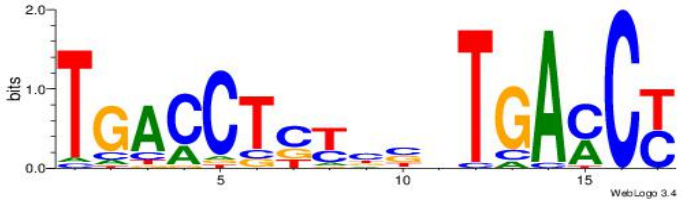
Dataset #: 3
Motif ID: 63
Motif name: RXRRAR_DR5
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 1
Number of overlap: 17
Similarity score: 0.570972

Alignment:
-RGKTCABVVRGAGGTCA
BAGGYCABHBTGACCKHV

Original motif Consensus sequence: RGKTCABVVRGAGGTCA

Reverse complement motif Consensus sequence: TGACCTCKVVBTGAYCK



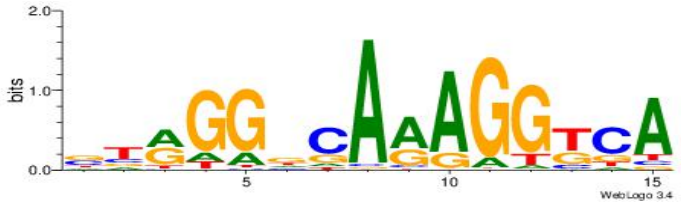


Dataset #:	3
Motif ID:	36
Motif name:	PPARGRXRA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	15
Similarity score:	1.56699

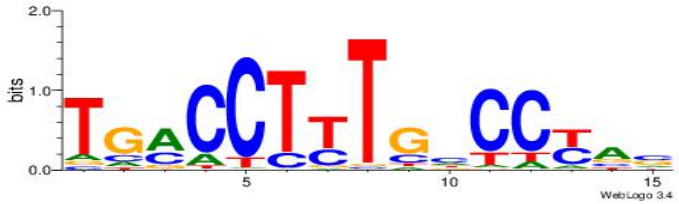
Alignment:

```
BTRGGDCARAGGKCA---
VHRGGTCABDBTGMCCTB
```

Original motif Consensus sequence: BTRGGDCARAGGKCA



Reverse complement motif Consensus sequence: TGRCCTKTGHCCK



Dataset #:	4
Motif ID:	91

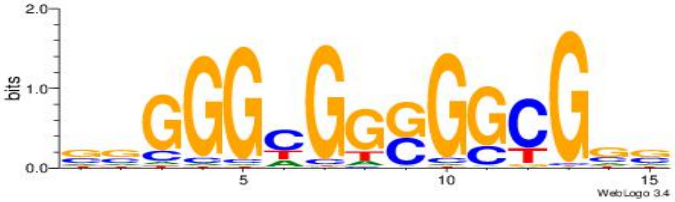
Motif name:	ssCGCCsCCrCCCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	15
Similarity score:	1.58524

Alignment:

```
SSGGGCGGSGGCGSS---
VHRGGTCABDBTGMCCTB
```

Original motif Consensus sequence: SSCGCCSCCGCCCSS

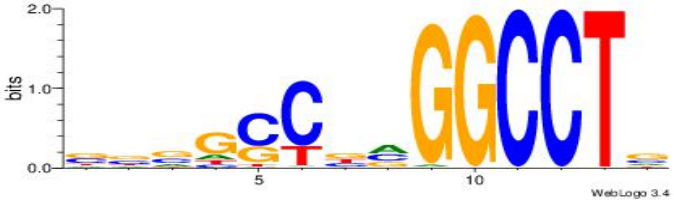
Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS



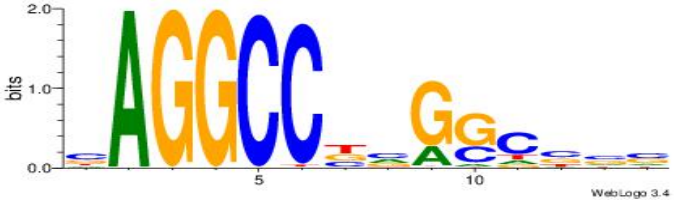
Dataset #:	3
Motif ID:	28
Motif name:	Zfx
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	2.07891

Alignment:
VAGGCCBBGGCVBB----
BAGGYCABHBTGACCKHV

Original motif Consensus sequence: BBVGCCBVGGCCTV



Reverse complement motif Consensus sequence: VAGGCCBBGGCVB

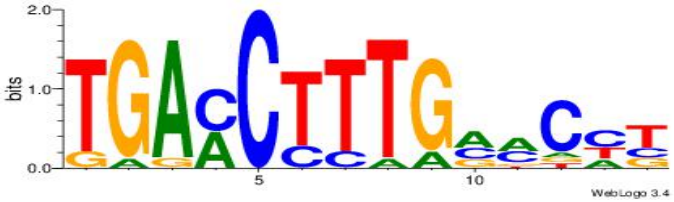


Dataset #:	3
Motif ID:	38
Motif name:	NR2F1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	2.08921

Alignment:
----TGAMCTTTGMMCYT
VHRGGTCABDBTGMCCTB

Original motif Consensus sequence: TGAMCTTTGMMCYT

Reverse complement motif Consensus sequence: AKGYYCAAAGRTCA



Dataset #: 3 Motif ID: 47 Motif name: Esrrb

Original motif Consensus sequence: CACGTG

Reverse complement motif Consensus sequence: CACGTG

Best Matches for Motif ID 47 (Highest to Lowest)

Dataset #:	3
Motif ID:	41
Motif name:	Arnt
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	6
Similarity score:	0

Alignment:

CACGTG

CACGTG

Original motif Consensus sequence: CACGTG

Reverse complement motif Consensus sequence: CACGTG

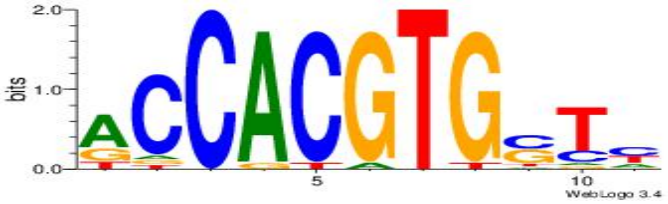
Dataset #:	3
Motif ID:	55
Motif name:	MYCMAX
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	6
Similarity score:	0.0143849

Alignment:

```
RASCACGTGGT
---CACGTG--
```

Original motif Consensus sequence: RASCACGTGGT

Reverse complement motif Consensus sequence: ACCACGTGSTM

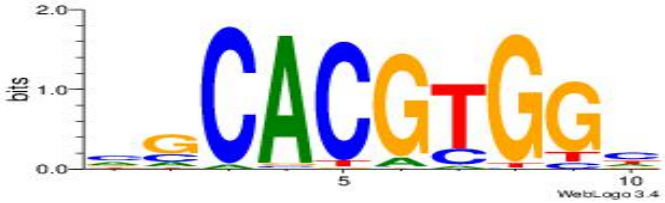


Dataset #:	3
Motif ID:	54
Motif name:	Myc
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	6
Similarity score:	0.0267529

Alignment:

```
DCCACGTGCV
--CACGTG--
```

Original motif Consensus sequence: VGCACGTGGH



Reverse complement motif Consensus sequence: DCCACGTGCV

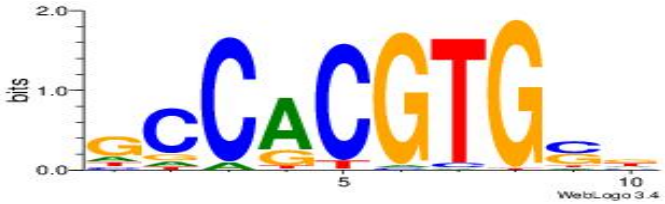
Dataset #:	3
Motif ID:	56
Motif name:	Mycn
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	6

Similarity score: 0.0272641

Alignment:
GCCACGTGSD
--CACGTG--

Original motif Consensus sequence: HSCACGTGGC

Reverse complement motif Consensus sequence: GCCACGTGSD



Dataset #: 3
Motif ID: 49
Motif name: HIF1AARNT
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: 0.0347756

Alignment:
VCACGTBV
-CACGTG-

Original motif Consensus sequence: VBACGTGV

Reverse complement motif Consensus sequence: VCACGTBV

Dataset #:	3
Motif ID:	42
Motif name:	ArntAhr
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:	0.065625

Alignment:

```
YGCGTG
CACGTG
```

Original motif Consensus sequence: YGCGTG

Reverse complement motif Consensus sequence: CACGCM

Dataset #:	3
Motif ID:	30

Motif name:	ZEB1
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:	0.0689533

Alignment:

```
HAGGTG
CACGTG
```

Original motif Consensus sequence: CACCTD

Reverse complement motif Consensus sequence: HAGGTG

Dataset #:	3
Motif ID:	44
Motif name:	Egr1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	6
Similarity score:	0.0784722

Alignment:
HGCGTGGGCGK
CACGTG-----

Original motif Consensus sequence: HGCGTGGGCGK

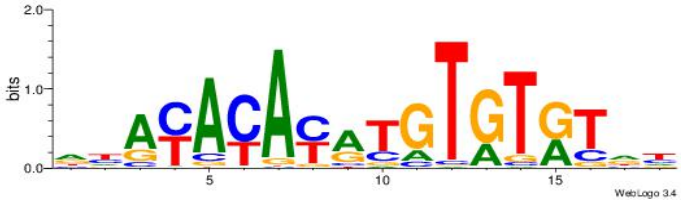
Reverse complement motif Consensus sequence: YCGCCCACGCH

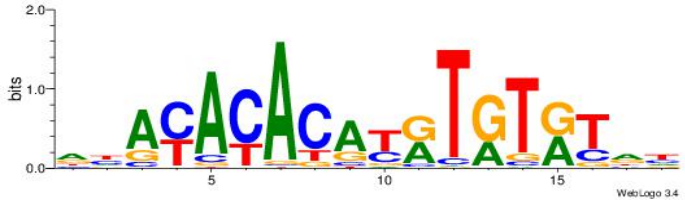
Dataset #:	4
Motif ID:	97
Motif name:	ryayAyAyrtGTRTrTry
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	6
Similarity score:	0.0849165

Alignment:
DHAYAYAYRTGTGTRTDH
-----CACGTG-------

Original motif Consensus sequence: DHAYAYAYRTGTGTRTDH

Reverse complement motif Consensus sequence: HDAMACACAKKTKTKTHD



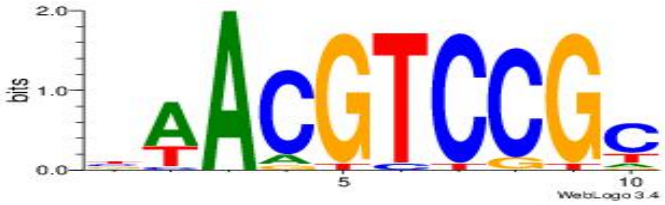


Dataset #:	3
Motif ID:	53
Motif name:	MIZF
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	6
Similarity score:	0.0854167

Alignment:

```
BAACGTCCGC
-CACGTG---
```

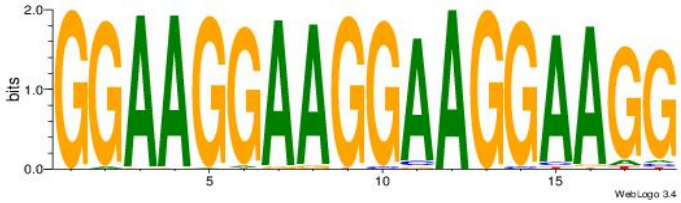
Original motif Consensus sequence: BAACGTCCGC



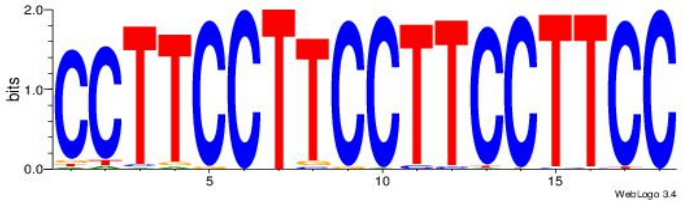
Reverse complement motif Consensus sequence: GCGGACGTTV

Dataset #: 3 Motif ID: 48 Motif name: EWSR1-FLI1

Original motif Consensus sequence: GGAAGGAAGGAAGGAAGG



Reverse complement motif Consensus sequence: CCTTCCTTCCTTCCTTCC



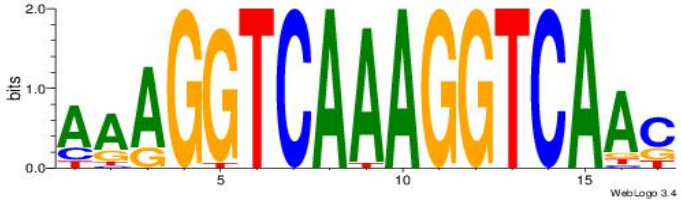
Best Matches for Motif ID 48 (Highest to Lowest)

Dataset #:	3
Motif ID:	59
Motif name:	NR1H2RXRA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	12
Similarity score:	1.09472

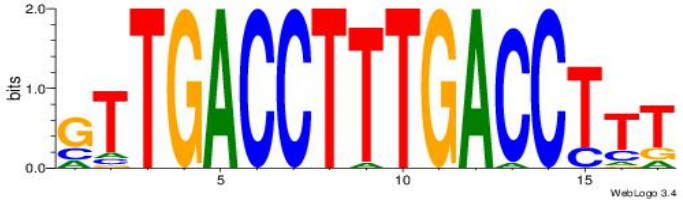
Alignment:

```
------AAAGGTCAAAGGTCAAC
GGAAGGAAGGAAGGAAGG-----
```

Original motif Consensus sequence: AAAGGTCAAAGGTCAAC



Reverse complement motif Consensus sequence: GTTGACCTTTGACCTTT

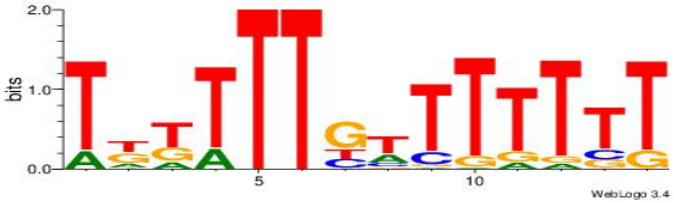


Dataset #:	2
Motif ID:	26
Motif name:	Motif 26
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	12
Similarity score:	1.1007

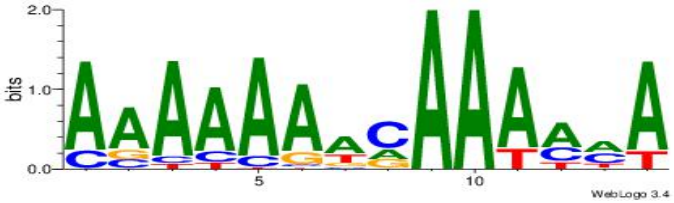
Alignment:

```
------TKKTTTGTTTTTTT
CCTTCCTTCCTTCCTTCC--
```

Original motif Consensus sequence: TKKTTTGTTTTTTT



Reverse complement motif Consensus sequence: AAAAAAACAAARR

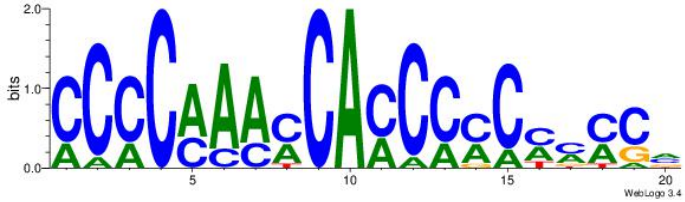


Dataset #:	3
Motif ID:	34
Motif name:	RREB1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	11

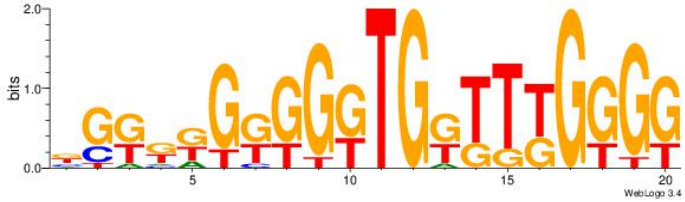
Number of overlap: 10
Similarity score: 2.09833

Alignment:
--------CCCCMAAMCAMCCMCMMMCV
CCTTCCTTCCTTCCTTCC----------

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG

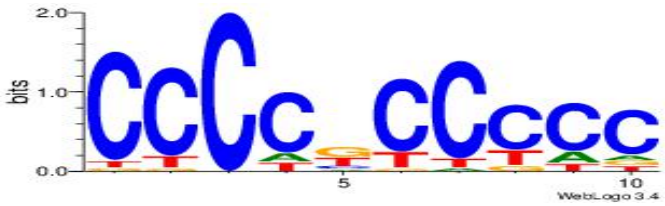


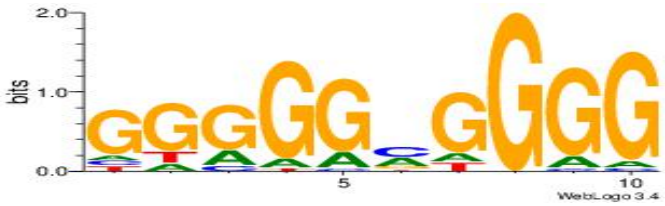
Dataset #: 3
Motif ID: 32
Motif name: SP1
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 2
Number of overlap: 9
Similarity score: 2.58264

Alignment:
GGGGGYGGGG---------
-GGAAGGAAGGAAGGAAGG

Original motif Consensus sequence: CCCCKCCCCC

Reverse complement motif Consensus sequence: GGGGGYGGGG





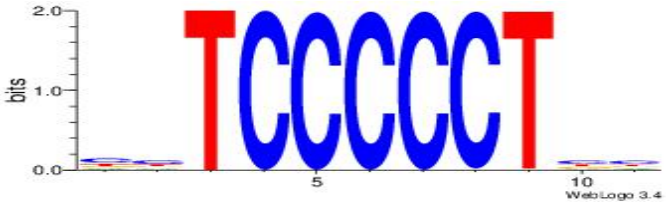
Dataset #:	4
Motif ID:	93
Motif name:	rrAGGGGGArr
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	9
Similarity score:	2.59702

Alignment:

```
---------VVAGGGGGAVV
GGAAGGAAGGAAGGAAGG--
```

Original motif Consensus sequence: VVAGGGGGAVV

Reverse complement motif Consensus sequence: VVTCCCCCTVV



Dataset #:	1
Motif ID:	13

Motif name:	Motif 13
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	8
Similarity score:	3.07051

Alignment:

```
----------GAGRCAGR
GGAAGGAAGGAAGGAAGG
```

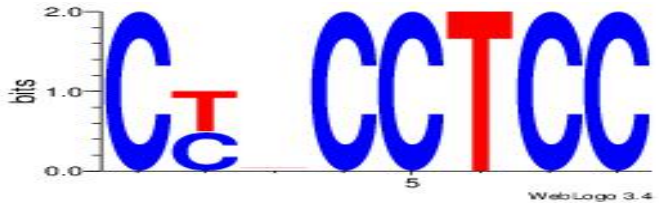
Original motif Consensus sequence: GAGRCAGR

Reverse complement motif Consensus sequence: MCTGKCTC

Dataset #:	1
Motif ID:	4
Motif name:	Motif 4
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:	3.07749

Alignment:
CYBCCTCC----------
CCTTCCTTCCTTCCTTCC

Original motif Consensus sequence: CYBCCTCC



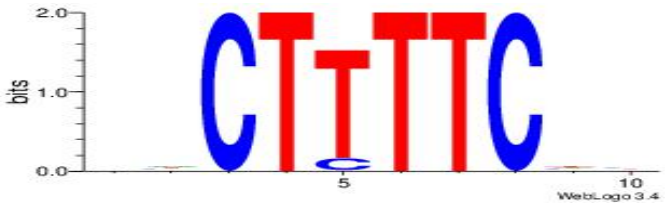
Reverse complement motif Consensus sequence: GGAGGVMG

Dataset #:	4
Motif ID:	68
Motif name:	dwCTTTTCwy
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	8
Similarity score:	3.08665

Alignment:
DHCTTTTCHH----------
--CCTTCCTTCCTTCCTTCC

Original motif Consensus sequence: DHCTTTTCHH

Reverse complement motif Consensus sequence: DHGAAAAGHD



Dataset #:	1
Motif ID:	7
Motif name:	Motif 7
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	8
Similarity score:	3.0889

Alignment:

```
ASASAGAA----------
GGAAGGAAGGAAGGAAGG
```

Original motif Consensus sequence: ASASAGAA

Reverse complement motif Consensus sequence: TTCTSTST

Dataset #:	1
Motif ID:	9

Motif name:	Motif 9
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	8
Similarity score:	3.08948

Alignment:

```
GCTGGGAW----------
GGAAGGAAGGAAGGAAGG
```

Original motif Consensus sequence: GCTGGGAW

Reverse complement motif Consensus sequence: WTCCCAGC

Dataset #: 3 Motif ID: 49 Motif name: HIF1AARNT

Original motif Consensus sequence: VBACGTGV

Reverse complement motif Consensus sequence: VCACGTBV

Best Matches for Motif ID 49 (Highest to Lowest)

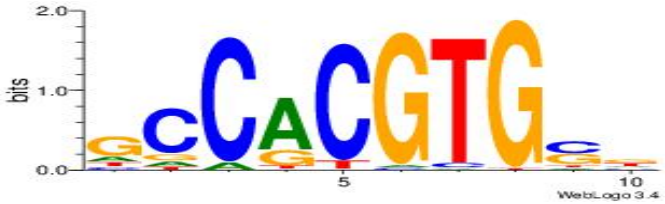
Dataset #:	3
Motif ID:	56
Motif name:	Mycn
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	8
Similarity score:	0.0228069

Alignment:

```
GCCACGTGSD
-VBACGTGV-
```

Original motif Consensus sequence: HSCACGTGGC

Reverse complement motif Consensus sequence: GCCACGTGSD

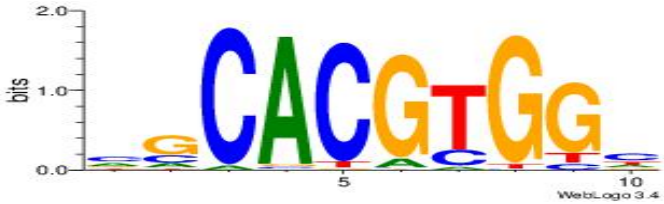


Dataset #:	3
Motif ID:	54
Motif name:	Myc
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	8

Similarity score: 0.0249459

Alignment:
DCCACGTGCV
-VBACGTGV-

Original motif Consensus sequence: VGCACGTGGH



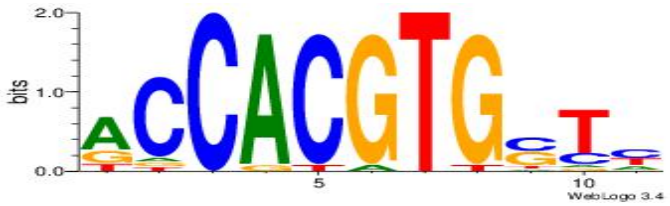
Reverse complement motif Consensus sequence: DCCACGTGCV

Dataset #: 3
Motif ID: 55
Motif name: MYCMAX
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 2
Number of overlap: 8
Similarity score: 0.0254922

Alignment:
RASCACGTGGT
--VBACGTGV-

Original motif Consensus sequence: RASCACGTGGT

Reverse complement motif Consensus sequence: ACCACGTGSTM

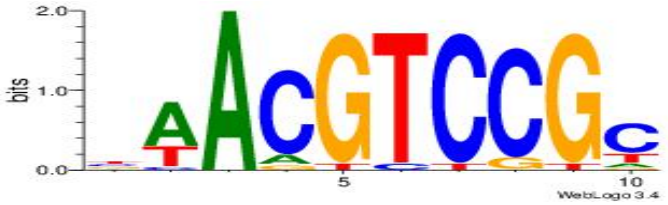


Dataset #:	3
Motif ID:	53
Motif name:	MIZF
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	8
Similarity score:	0.0482171

Alignment:

```
GCGGACGTTV
--VCACGTBV
```

Original motif Consensus sequence: BAACGTCCGC



Reverse complement motif Consensus sequence: GCGGACGTTV

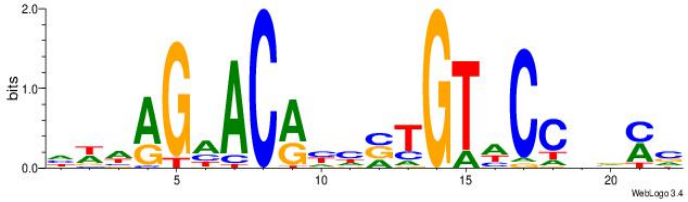
Dataset #:	3
Motif ID:	40

Motif name:	Ar
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	11
Number of overlap:	8
Similarity score:	0.0533654

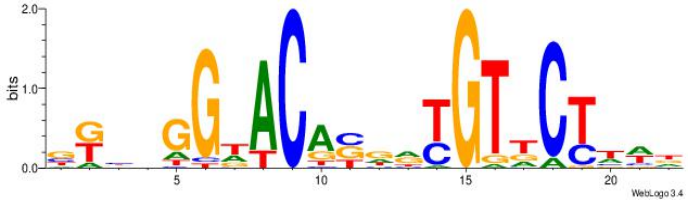
Alignment:

```
VRVDGGHACAVDDKGTHCTDWH
----VBACGTGV----------
```

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



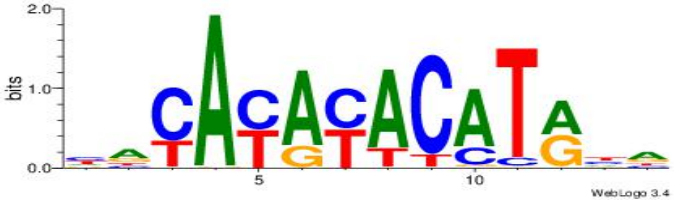
Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH



Dataset #:	4
Motif ID:	75
Motif name:	yayAyAyACATrya
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	8
Similarity score:	0.0615181

Alignment:
HACAYAYACATRHD
-----VBACGTGV-

Original motif Consensus sequence: HACAYAYACATRHD



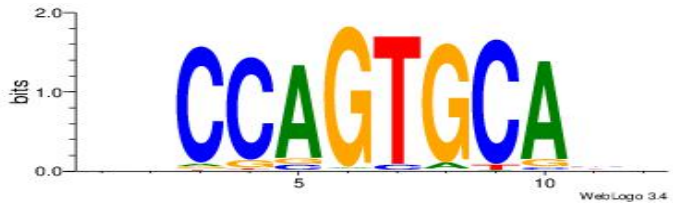
Reverse complement motif Consensus sequence: DHKATGTKTKTGT

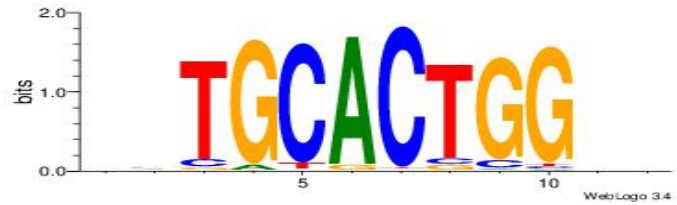
Dataset #:	4
Motif ID:	103
Motif name:	ccCCAGTGCAbr
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0.0642624

Alignment:
DBTGCACTGGVD
---VCACGTBV-

Original motif Consensus sequence: HVCCAGTGCABD

Reverse complement motif Consensus sequence: DBTGCACTGGVD



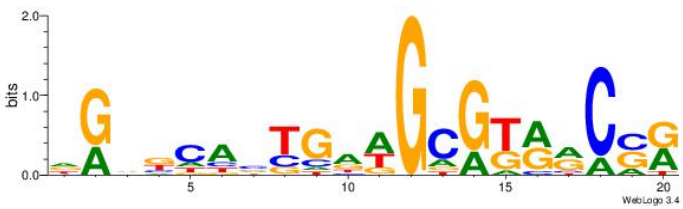


Dataset #:	3
Motif ID:	61
Motif name:	Pax5
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	8
Number of overlap:	8
Similarity score:	0.0661859

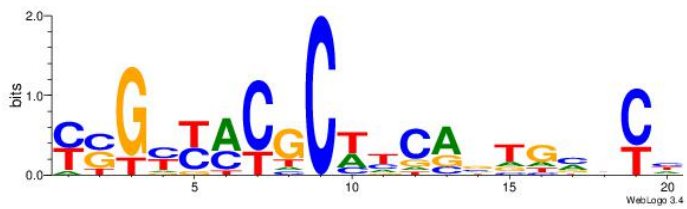
Alignment:

```
MSGKKRCGCWDCABTGBBCD
-----VCACGTBV-------
```

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR



Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD



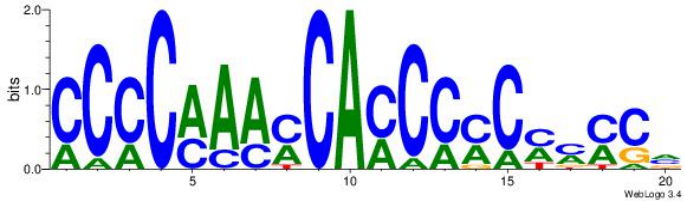
Dataset #: 3

Motif ID:	34
Motif name:	RREB1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	8
Similarity score:	0.0666776

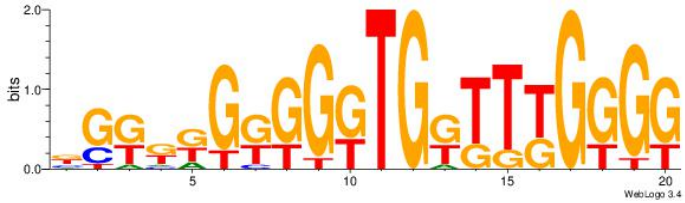
Alignment:

```
CCCCMAAMCAMCCMCMMMCV
-----VCACGTBV-------
```

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG



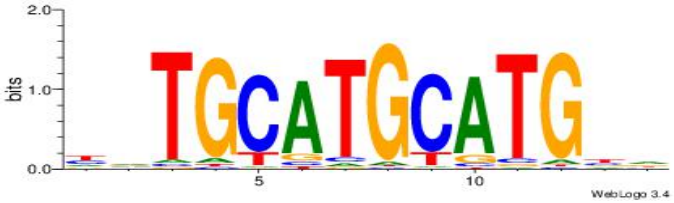
Dataset #:	4
Motif ID:	101
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	8

Similarity score: 0.0666933

Alignment:
DVTGCATGCATGBH
-VBACGTGV-----

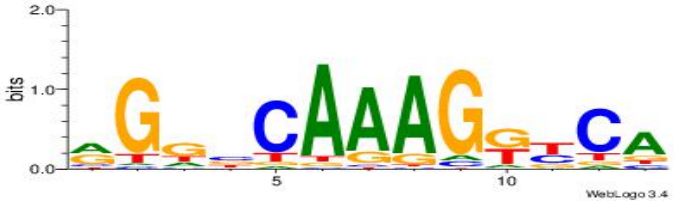
Original motif Consensus sequence: HVCATGCATGCABD

Reverse complement motif Consensus sequence: DVTGCATGCATGB

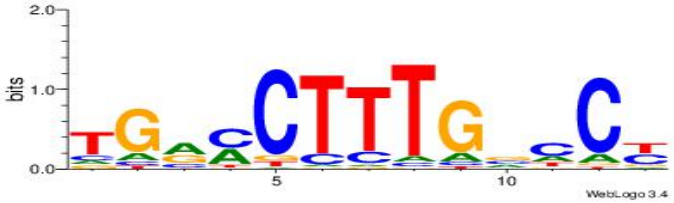


Dataset #: 3 Motif ID: 50 Motif name: HNF4A

Original motif Consensus sequence: RGGBCAAAGKYCA



Reverse complement motif Consensus sequence: TGMYCTTTGBCCK



Best Matches for Motif ID 50 (Highest to Lowest)

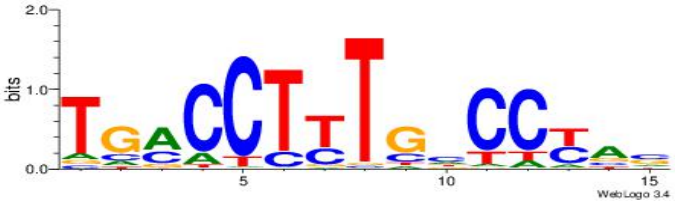
Dataset #:	3
Motif ID:	36
Motif name:	PPARGRXRA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward

Position number: 3
Number of overlap: 13
Similarity score: 0

Alignment:
TGRCCTKTGHCCKAB
TGMYCTTTGBCCK--

Original motif Consensus sequence: BTRGGDCARAGGKCA

Reverse complement motif Consensus sequence: TGRCCTKTGHCCK

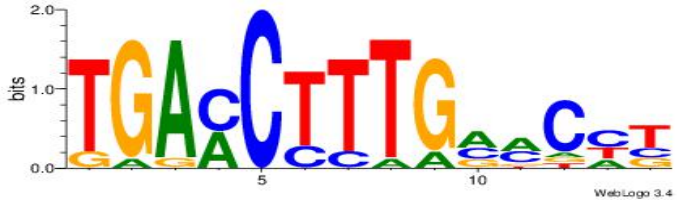


Dataset #: 3
Motif ID: 38
Motif name: NR2F1
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 2
Number of overlap: 13
Similarity score: 0.0227413

Alignment:
TGAMCTTTGMMCYT
-TGMYCTTTGBCCK

Original motif Consensus sequence: TGAMCTTTGMMCYT

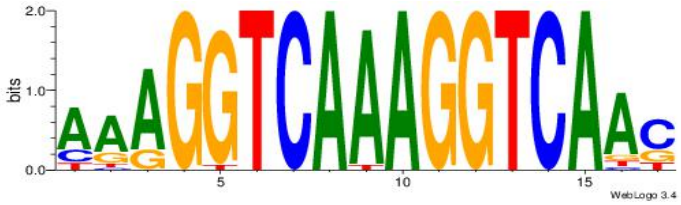
Reverse complement motif Consensus sequence: AKGYYCAAAGRTC



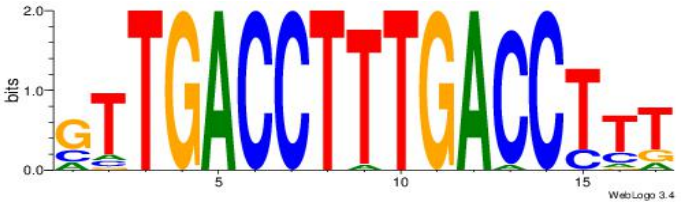
Dataset #: 3
Motif ID: 59
Motif name: NR1H2RXRA
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 3
Number of overlap: 13
Similarity score: 0.0423023

Alignment:
AAAGGTCAAAGGTCAAC
--RGGBCAAAGKYCA--

Original motif Consensus sequence: AAAGGTCAAAGGTCAAC



Reverse complement motif Consensus sequence: GTTGACCTTTGACCTTT



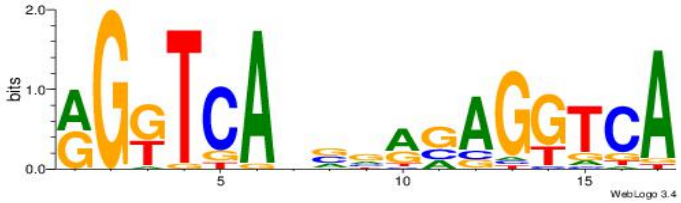
Dataset #: 3

Motif ID:	63
Motif name:	RXRRAR_DR5
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	13
Similarity score:	0.048852

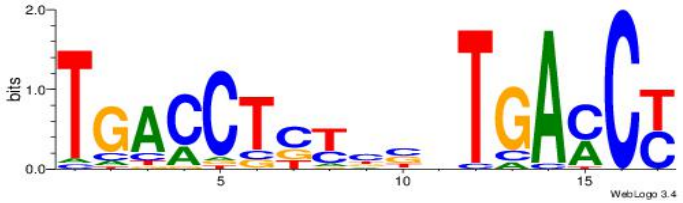
Alignment:

```
TGACCTCKVVBTGAYCK
TGMYCTTTGBCCK----
```

Original motif Consensus sequence: RGKTCABVVRGAGGTCA



Reverse complement motif Consensus sequence: TGACCTCKVVBTGAYCK

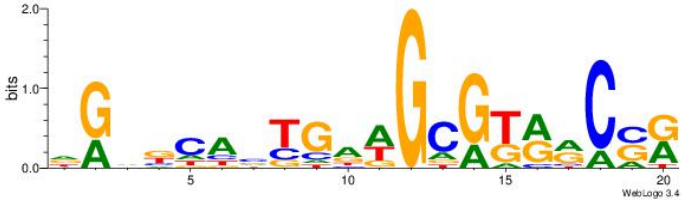


Dataset #:	3
Motif ID:	61
Motif name:	Pax5
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	8
Number of overlap:	13

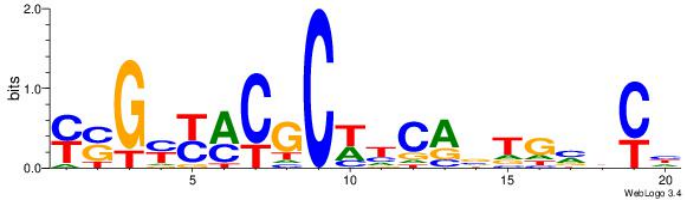
Similarity score: 0.063924

Alignment:
MSGKKRCGCWDCABTGBBCD
-------RGGBCAAAGKYCA

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR



Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD

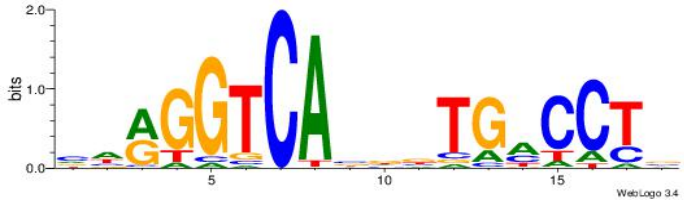


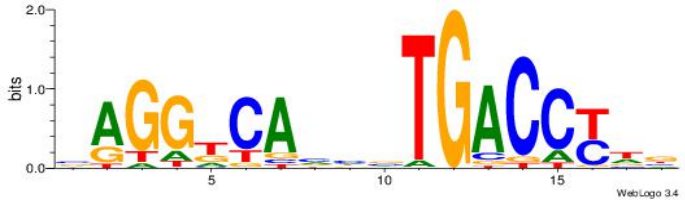
Dataset #: 3
Motif ID: 46
Motif name: ESR2
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 3
Number of overlap: 13
Similarity score: 0.0671615

Alignment:
VHRGGTCABDBTGMCCTB
--RGGBCAAAGKYCA---

Original motif Consensus sequence: VHRGGTCABDBTGMCCTB

Reverse complement motif Consensus sequence: BAGGYCABHBTGACCKHV



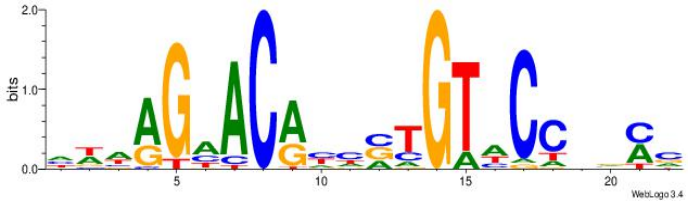


Dataset #:	3
Motif ID:	40
Motif name:	Ar
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	13
Similarity score:	0.067775

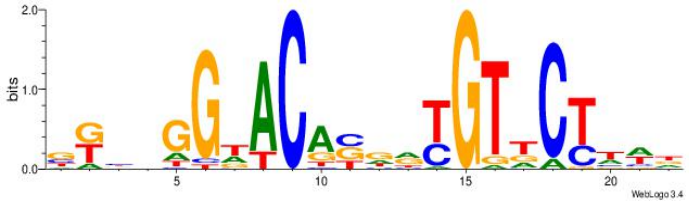
Alignment:

```
VRVDGGHACAVDDKGTHCTDWH
------TGMYCTTTGBCCK---
```

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH



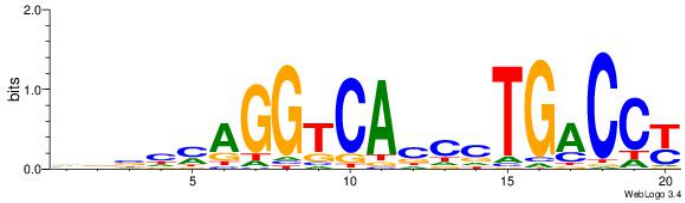
Dataset #:	3

Motif ID:	45
Motif name:	ESR1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	13
Similarity score:	0.0711137

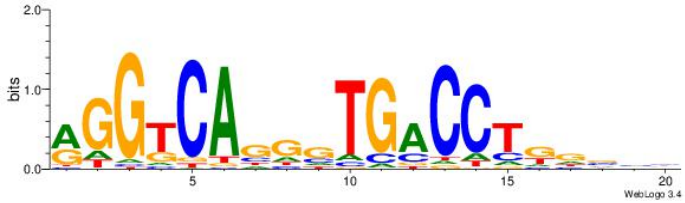
Alignment:

```
VDBHMAGGTCACCCTGACCY
TGMYCTTTGBCCK-------
```

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY



Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV



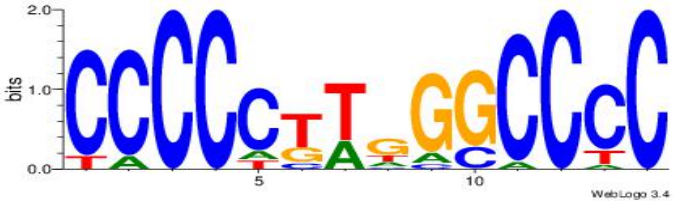
Dataset #:	3
Motif ID:	37
Motif name:	PLAG1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	13

Similarity score: 0.0714266

Alignment:
GGGGCCCAAGGGGG
-RGGBCAAAGKYCA

Original motif Consensus sequence: GGGGCCCAAGGGGG

Reverse complement motif Consensus sequence: CCCCCTTGGGCCC

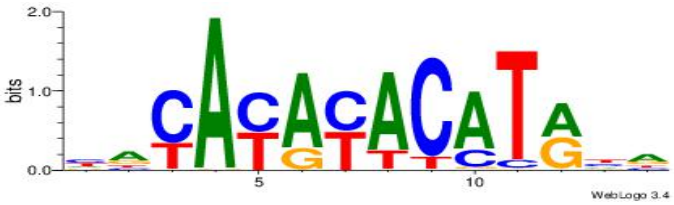


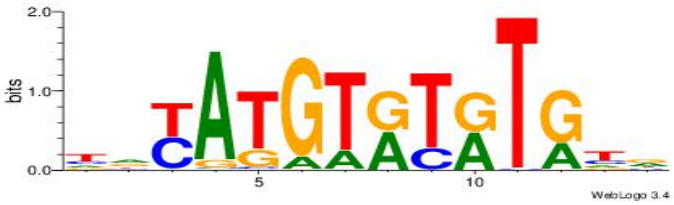
Dataset #: 4
Motif ID: 75
Motif name: yayAyAyACATrya
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 2
Number of overlap: 13
Similarity score: 0.0734915

Alignment:
DHKATGTKTKTGTD
-TGMYCTTTGBCCK

Original motif Consensus sequence: HACAYAYACATRHD

Reverse complement motif Consensus sequence: DHKATGTKTKTGT

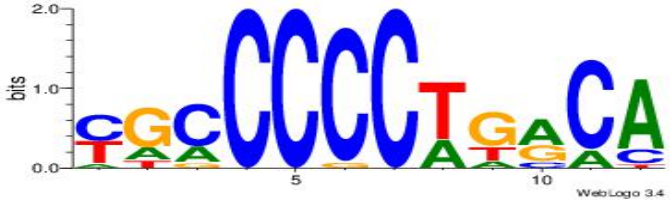




Dataset #: 3 Motif ID: 51 Motif name: INSM1

Original motif Consensus sequence: TGYCAGGGGGCR

Reverse complement motif Consensus sequence: MGCCCCCTGMCA



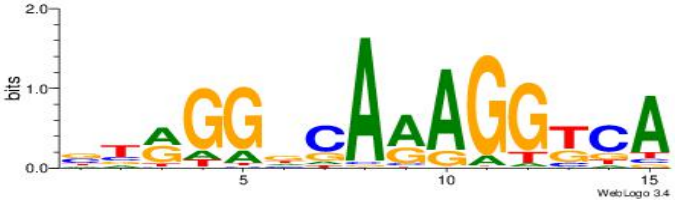
Best Matches for Motif ID 51 (Highest to Lowest)

Dataset #:	3
Motif ID:	36
Motif name:	PPARGRXRA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	12
Similarity score:	0.0472454

Alignment:

```
BTRGGDCARAGGKCA
---TGYCAGGGGGCR
```

Original motif Consensus sequence: BTRGGDCARAGGKCA



Reverse complement motif Consensus sequence: TGRCCTKTGHCCK

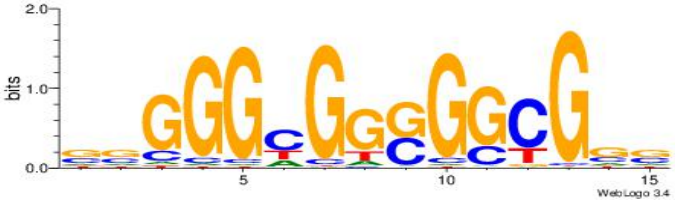
Dataset #:	4
Motif ID:	91
Motif name:	ssCGCCsCCrCCCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	12
Similarity score:	0.0477144

Alignment:

```
SSCGCCSCCGCCCSS
--MGCCCCCTGMCA-
```

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS

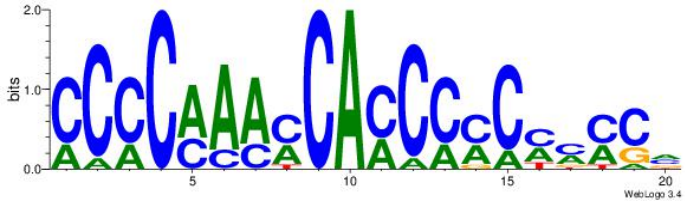


Dataset #:	3
Motif ID:	34
Motif name:	RREB1
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.0499162

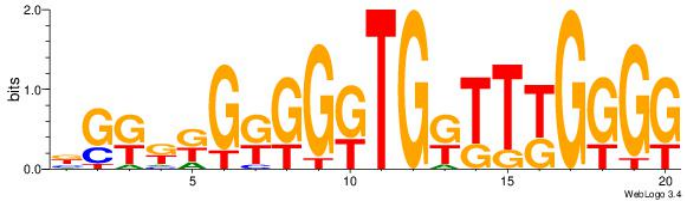
Alignment:

```
BGRRRGRGGRTGRTTYGGGG
--------TGYCAGGGGGCR
```

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG

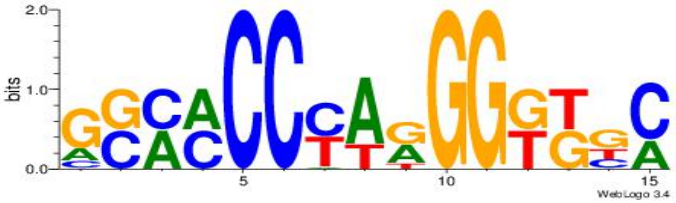


Dataset #:	3
Motif ID:	29
Motif name:	Zfp423
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3

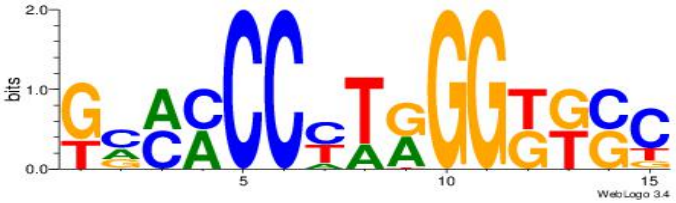
Number of overlap: 12
Similarity score: 0.0538619

Alignment:
GYRYCCMTKGGYRSC
-MGCCCCCTGMCA--

Original motif Consensus sequence: GSMMCCYARGGKKKC



Reverse complement motif Consensus sequence: GYRYCCMTKGGYR

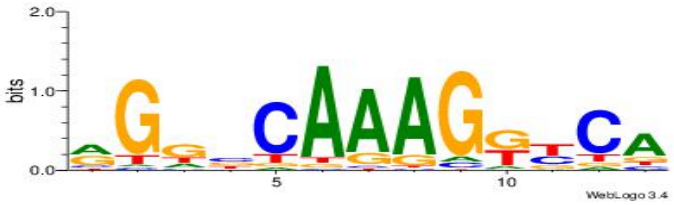


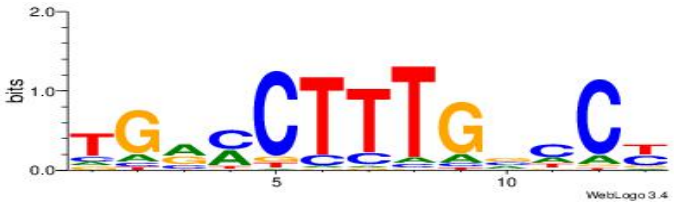
Dataset #: 3
Motif ID: 50
Motif name: HNF4A
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 2
Number of overlap: 12
Similarity score: 0.0551858

Alignment:
RGGBCAAAGKYCA
-TGYCAGGGGGCR

Original motif Consensus sequence: RGGBCAAAGKYCA

Reverse complement motif Consensus sequence: TGMYCTTTGBCCK



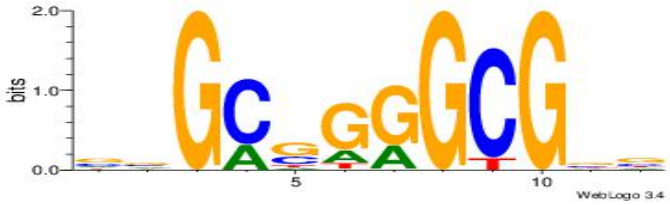


Dataset #:	4
Motif ID:	67
Motif name:	ssGMsGRGCGss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.0598772

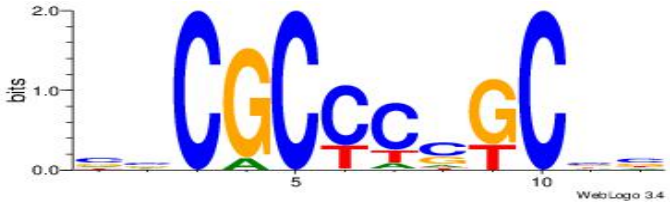
Alignment:

```
BBCGCCCSGCVV
MGCCCCCTGMCA
```

Original motif Consensus sequence: VVGCSGGGCGBB



Reverse complement motif Consensus sequence: BBCGCCCSGCVV



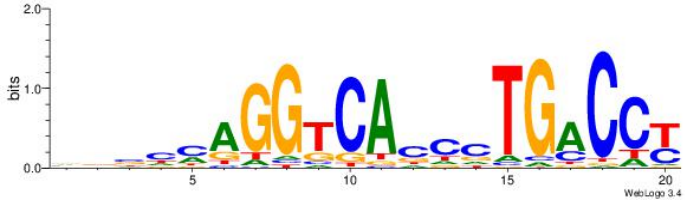
Dataset #:	3
Motif ID:	45

Motif name:	ESR1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	8
Number of overlap:	12
Similarity score:	0.0630846

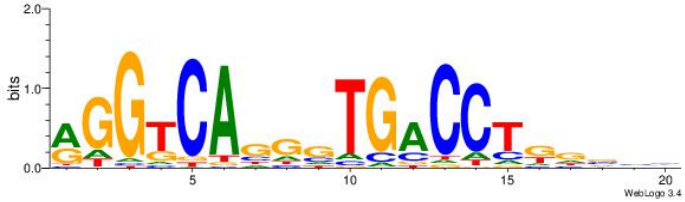
Alignment:

```
VDBHMAGGTCACCCTGACCY
-TGYCAGGGGGCR-------
```

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY



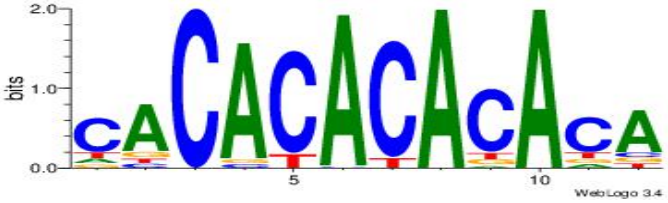
Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV



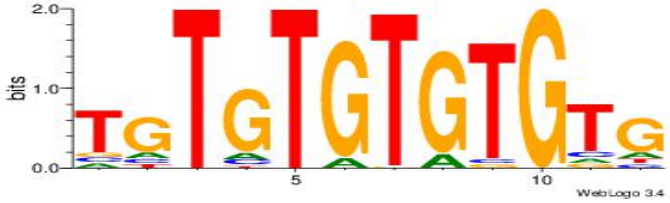
Dataset #:	4
Motif ID:	95
Motif name:	CACACACACACA
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.0673571

Alignment:
TGTGTGTGTGTG
TGYCAGGGGGCR

Original motif Consensus sequence: CACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTG

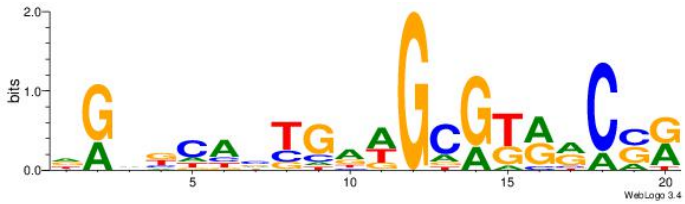


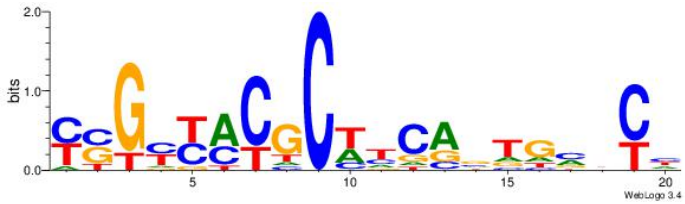
Dataset #:	3
Motif ID:	61
Motif name:	Pax5
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	12
Similarity score:	0.0679087

Alignment:
DGVBCABTGDWGCGKRRCSR
-----TGYCAGGGGGCR---

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR

Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD



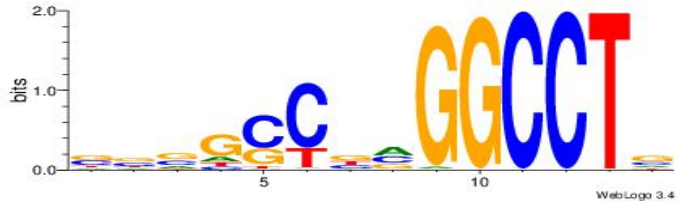


Dataset #:	3
Motif ID:	28
Motif name:	Zfx
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	12
Similarity score:	0.069037

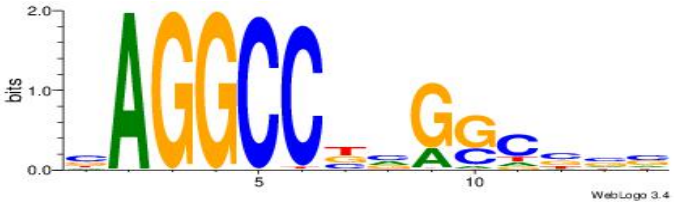
Alignment:

```
VAGGCCBBGGCVBB
-MGCCCCCTGMCA-
```

Original motif Consensus sequence: BBVGCCBVGGCCTV



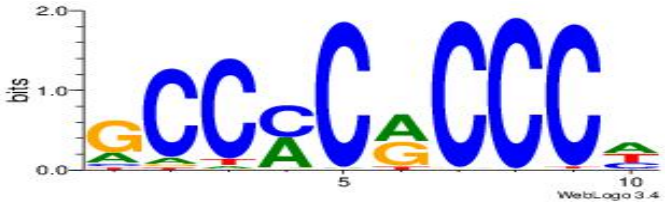
Reverse complement motif Consensus sequence: VAGGCCBBGGCVB



Dataset #: 3 Motif ID: 52 Motif name: Klf4

Original motif Consensus sequence: DGGGYGKGGC

Reverse complement motif Consensus sequence: GCCYCMCCCD



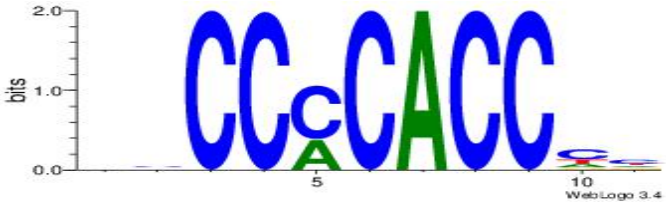
Best Matches for Motif ID 52 (Highest to Lowest)

Dataset #:	4
Motif ID:	89
Motif name:	ccCCmCACCcc
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0387664

Alignment:

```
DDGGTGRGGBD
DGGGYGKGGC-
```

Original motif Consensus sequence: HBCCMCACCHH



Reverse complement motif Consensus sequence: DDGGTGRGGBD

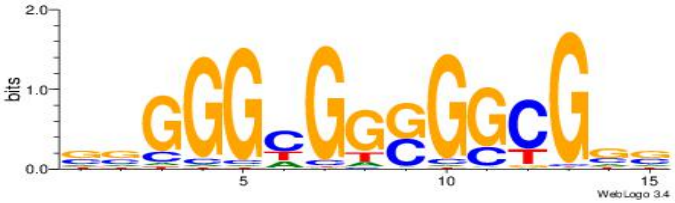
Dataset #:	4
Motif ID:	91
Motif name:	ssCGCCsCCrCCCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	10
Similarity score:	0.0433615

Alignment:

```
SSGGGCGGSGGCGSS
-DGGGYGKGGC----
```

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS

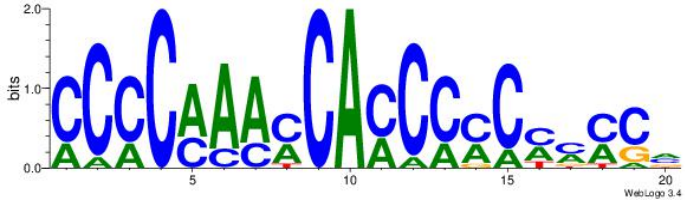


Dataset #:	3
Motif ID:	34
Motif name:	RREB1
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1

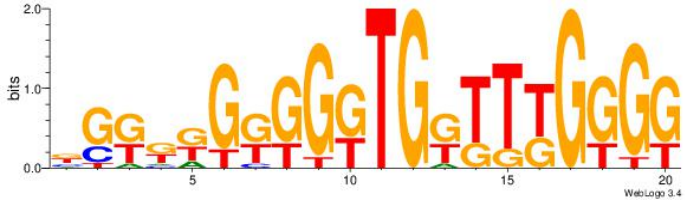
Number of overlap: 10
Similarity score: 0.065355

Alignment:
BGRRRGRGGRTGRTTYGGGG
----------DGGGYGKGGC

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG

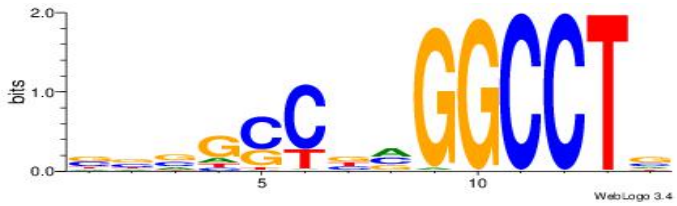


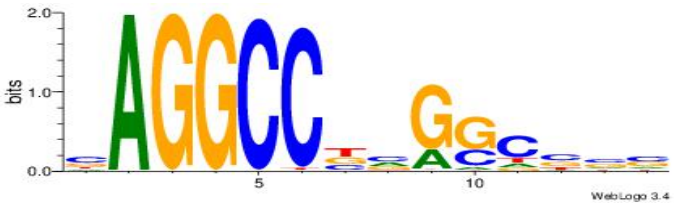
Dataset #: 3
Motif ID: 28
Motif name: Zfx
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 4
Number of overlap: 10
Similarity score: 0.0734166

Alignment:
BBVGCCBVGGCCTV
-GCCYCMCCCD---

Original motif Consensus sequence: BBVGCCBVGGCCTV

Reverse complement motif Consensus sequence: VAGGCCBBGGCVB



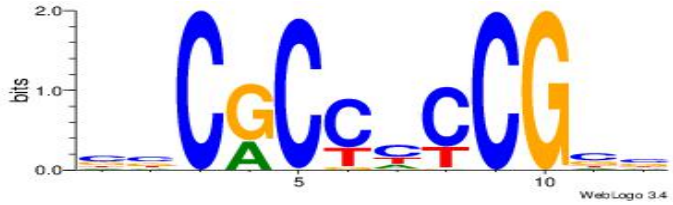


Dataset #:	4
Motif ID:	88
Motif name:	ssCrCYyYCGss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0748311

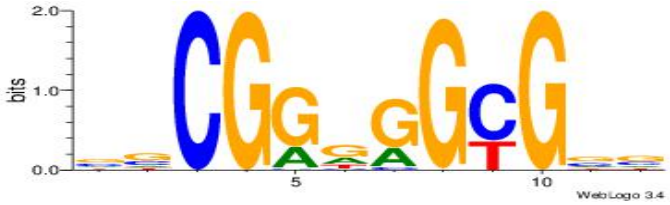
Alignment:

```
BBCRCCYCCGBB
GCCYCMCCCD--
```

Original motif Consensus sequence: BBCRCCYCCGBB



Reverse complement motif Consensus sequence: BBCGGKGGMGBB



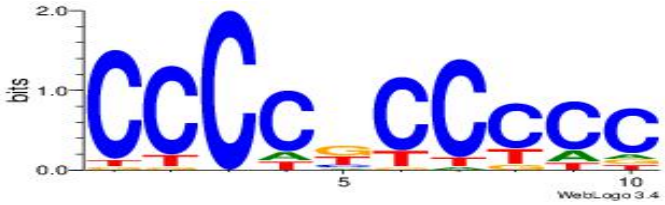
Dataset #:	3
Motif ID:	32

Motif name:	SP1
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0773711

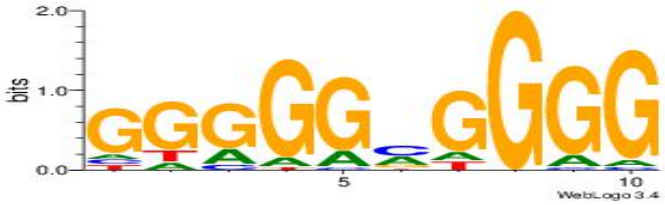
Alignment:

```
GGGGGYGGGG
DGGGYGKGGC
```

Original motif Consensus sequence: CCCCKCCCCC



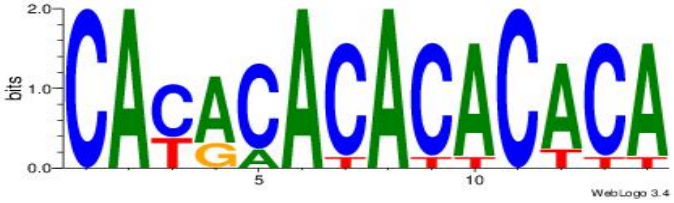
Reverse complement motif Consensus sequence: GGGGGYGGGG



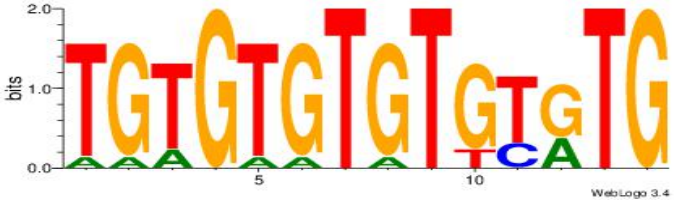
Dataset #:	2
Motif ID:	27
Motif name:	Motif 27
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	10
Similarity score:	0.0781179

Alignment:
CAYACACACACACA
--GCCYCMCCCD--

Original motif Consensus sequence: CAYACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTKT

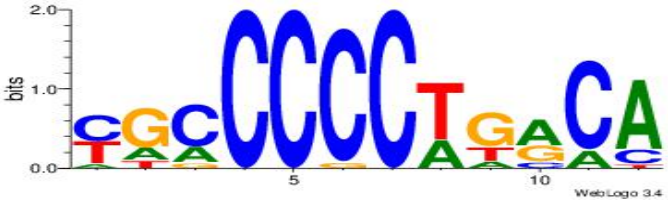


Dataset #:	3
Motif ID:	51
Motif name:	INSM1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	10
Similarity score:	0.0785684

Alignment:
MGCCCCCTGMCA
--GCCYCMCCCD

Original motif Consensus sequence: TGYCAGGGGGCR

Reverse complement motif Consensus sequence: MGCCCCCTGMCA

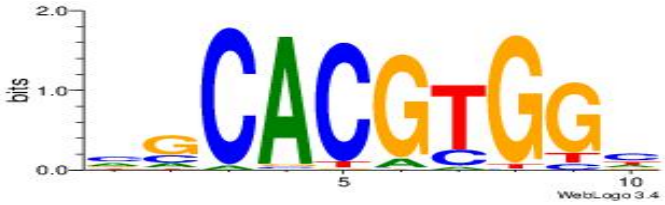


Dataset #:	3
Motif ID:	54
Motif name:	Myc
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0797423

Alignment:

```
VGCACGTGGH
DGGGYGKGGC
```

Original motif Consensus sequence: VGCACGTGGH



Reverse complement motif Consensus sequence: DCCACGTGCV

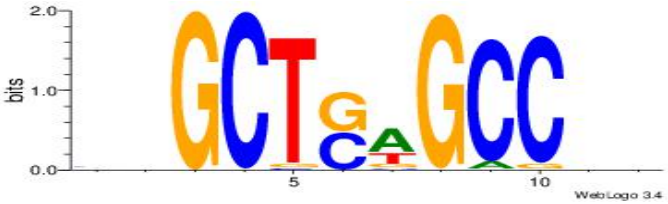
Dataset #:	4
Motif ID:	77

Motif name:	ssGCTswGCCms
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0798763

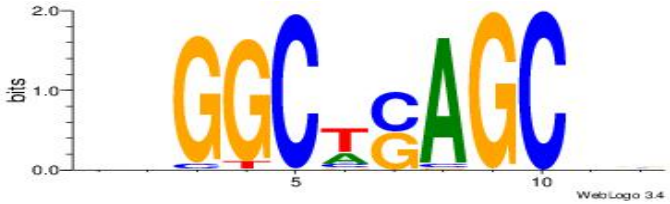
Alignment:

```
VBGCTSAGCCHB
-GCCYCMCCCD-
```

Original motif Consensus sequence: VBGCTSAGCCHB

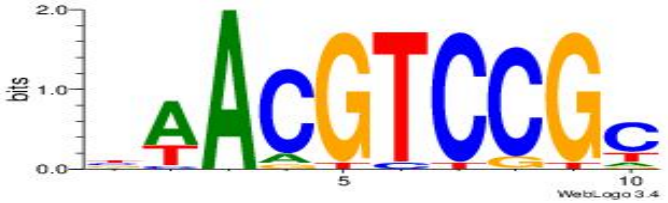


Reverse complement motif Consensus sequence: BDGGCTSAGCBV



Dataset #: 3 Motif ID: 53 Motif name: MIZF

Original motif Consensus sequence: BAACGTCCGC



Reverse complement motif Consensus sequence: GCGGACGTTV

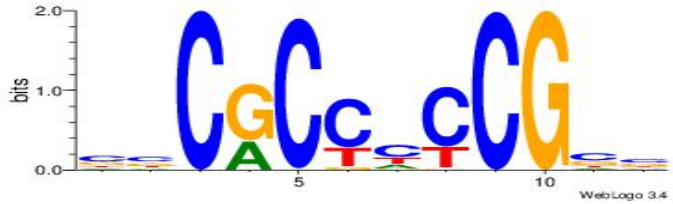
Best Matches for Motif ID 53 (Highest to Lowest)

Dataset #:	4
Motif ID:	88
Motif name:	ssCrCYyYCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0697975

Alignment:

```
BBCRCCYCCGBB
-BAACGTCCGC-
```

Original motif Consensus sequence: BBCRCCYCCGBB



Reverse complement motif Consensus sequence: BBCGGKGGMGBB

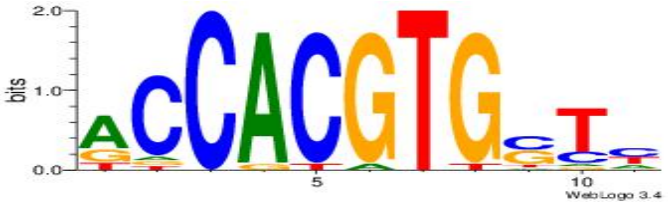
Dataset #:	3
Motif ID:	55
Motif name:	MYCMAX
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	10

Similarity score: 0.0699702

Alignment:
ACCACGTGSTM
-BAACGTCCGC

Original motif Consensus sequence: RASCACGTGGT

Reverse complement motif Consensus sequence: ACCACGTGSTM

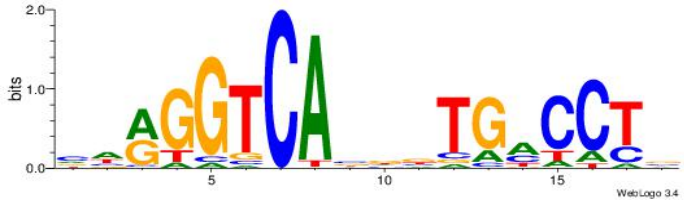


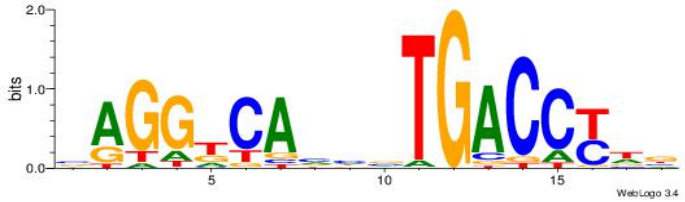
Dataset #: 3
Motif ID: 46
Motif name: ESR2
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 1
Number of overlap: 10
Similarity score: 0.0708456

Alignment:
BAGGYCABHBTGACCKHV
--------GCGGACGTTV

Original motif Consensus sequence: VHRGGTCABDBTGMCCTB

Reverse complement motif Consensus sequence: BAGGYCABHBTGACCKHV



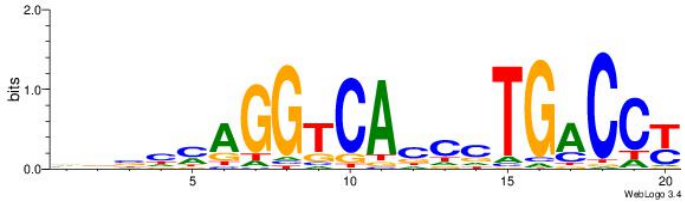


Dataset #:	3
Motif ID:	45
Motif name:	ESR1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	8
Number of overlap:	10
Similarity score:	0.0717246

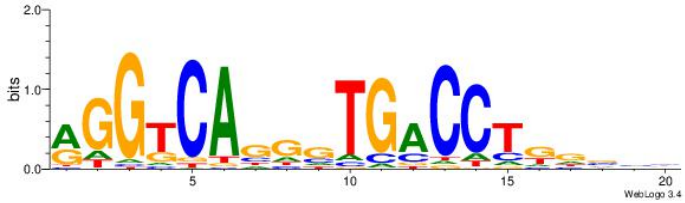
Alignment:

```
VDBHMAGGTCACCCTGACCY
---BAACGTCCGC-------
```

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY



Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV



Dataset #:	4

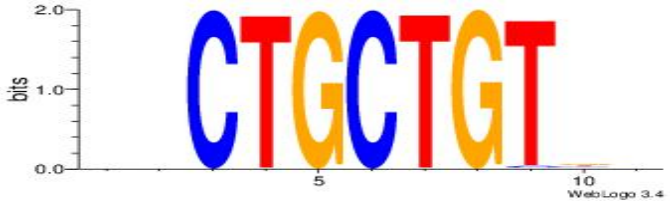
Motif ID:	82
Motif name:	rmACAGCAGsr
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0718896

Alignment:

```
DVCTGCTGTVB
-GCGGACGTTV
```

Original motif Consensus sequence: VVACAGCAGVD

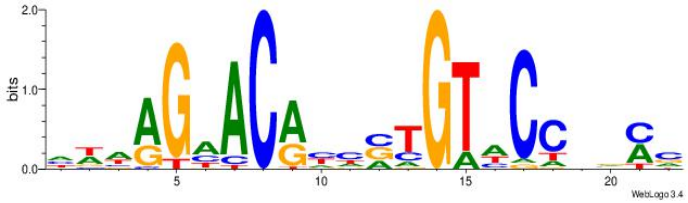
Reverse complement motif Consensus sequence: DVCTGCTGTVB



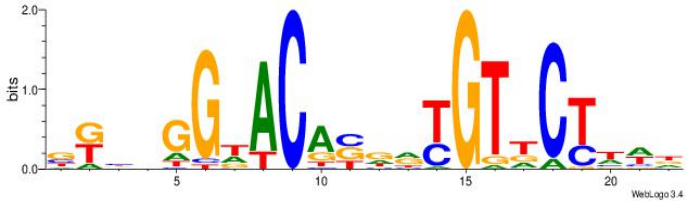
Dataset #:	3
Motif ID:	40
Motif name:	Ar
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	10
Similarity score:	0.0741667

Alignment:
HWDAGHACRHHVTGTHCCHVMV
---------BAACGTCCGC---

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH

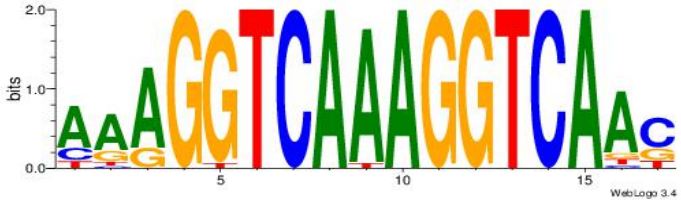


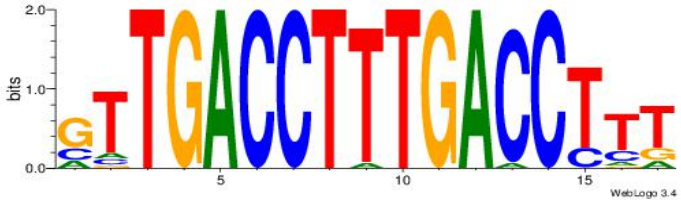
Dataset #:	3
Motif ID:	59
Motif name:	NR1H2RXRA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.074875

Alignment:
AAAGGTCAAAGGTCAAC
-------BAACGTCCGC

Original motif Consensus sequence: AAAGGTCAAAGGTCAAC

Reverse complement motif Consensus sequence: GTTGACCTTTGACCTTT

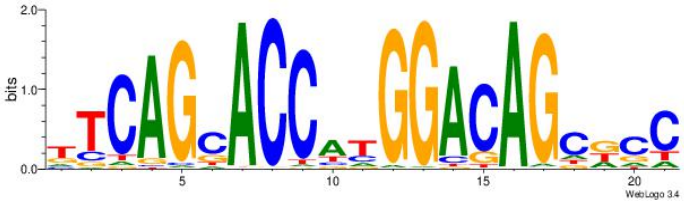




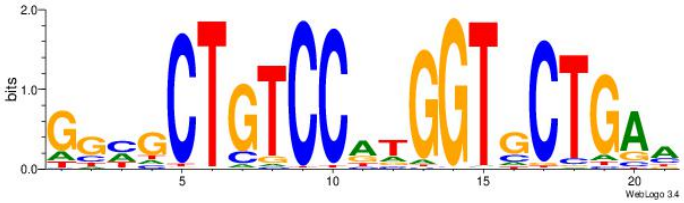
Dataset #: 3
Motif ID: 35
Motif name: REST
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 3
Number of overlap: 10
Similarity score: 0.0810827

Alignment:
GGYGCTGTCCATGGTGCTGAA
---------BAACGTCCGC--

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC



Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA



Dataset #: 4

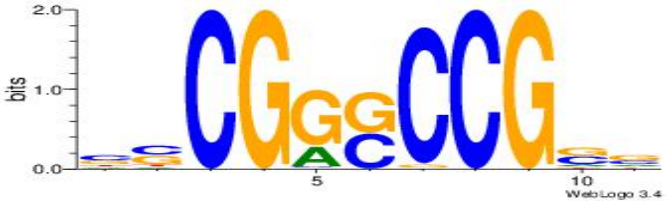
Motif ID:	87
Motif name:	ssCGGsYCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0815371

Alignment:

```
BSCGGSCCGSV
BAACGTCCGC-
```

Original motif Consensus sequence: BSCGGSCCGSV

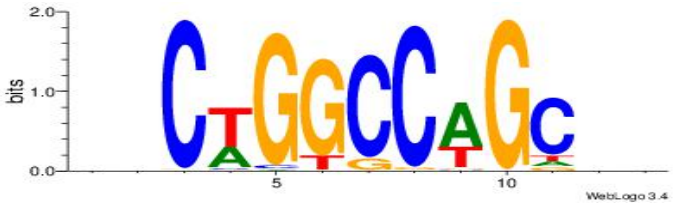
Reverse complement motif Consensus sequence: VSCGGSCCGSB



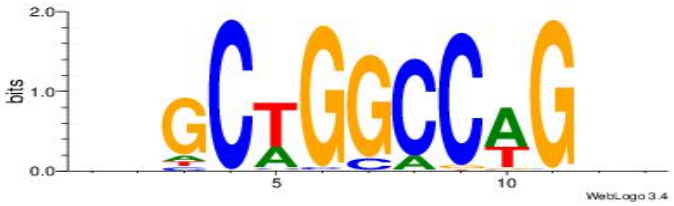
Dataset #:	4
Motif ID:	80
Motif name:	ssCwGGCCwGCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	10
Similarity score:	0.0878113

Alignment:
BBCWGGCCAGCBB
-BAACGTCCGC--

Original motif Consensus sequence: BBCWGGCCAGCBB

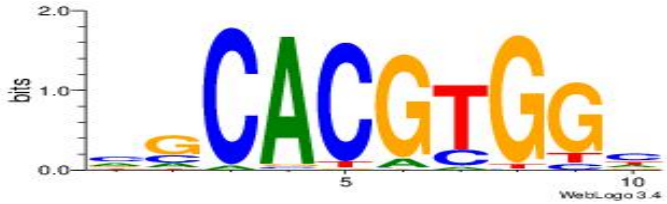


Reverse complement motif Consensus sequence: BBGCTGGCCWGBI



Dataset #: 3 Motif ID: 54 Motif name: Myc

Original motif Consensus sequence: VGCACGTGGH



Reverse complement motif Consensus sequence: DCCACGTGCV

Best Matches for Motif ID 54 (Highest to Lowest)

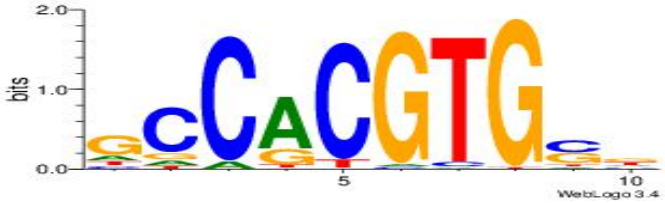
Dataset #:	3
Motif ID:	56
Motif name:	Mycn
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1

Number of overlap: 10
Similarity score: 0

Alignment:
HSCACGTGGC
VGCACGTGGH

Original motif Consensus sequence: HSCACGTGGC

Reverse complement motif Consensus sequence: GCCACGTGSD

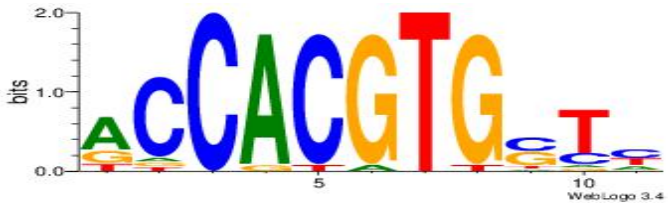


Dataset #: 3
Motif ID: 55
Motif name: MYCMAX
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 1
Number of overlap: 10
Similarity score: 0.0209359

Alignment:
RASCACGTGGT
-VGCACGTGGH

Original motif Consensus sequence: RASCACGTGGT

Reverse complement motif Consensus sequence: ACCACGTGSTM

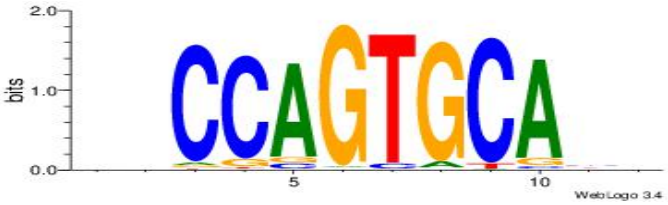


Dataset #:	4
Motif ID:	103
Motif name:	ccCCAGTGCAbr
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0708559

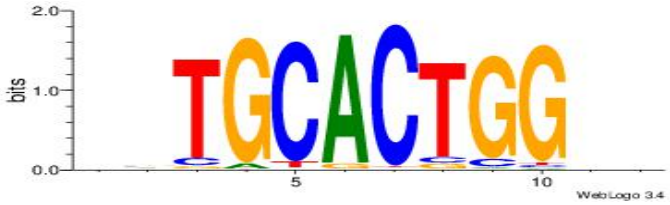
Alignment:

```
HVCCAGTGCABD
DCCACGTGCV--
```

Original motif Consensus sequence: HVCCAGTGCABD



Reverse complement motif Consensus sequence: DBTGCACTGGVD



Dataset #:	4
Motif ID:	66

Motif name:	ssCGssCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0820751

Alignment:

```
BSCGSSCGSV
VGCACGTGGH
```

Original motif Consensus sequence: BSCGSSCGSV

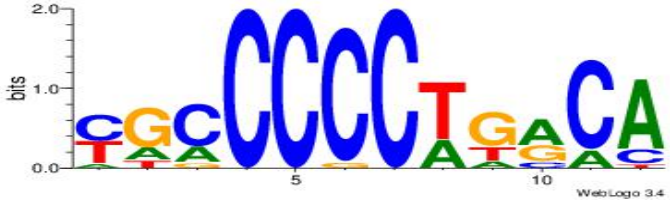
Reverse complement motif Consensus sequence: VSCGSSCGSB

Dataset #:	3
Motif ID:	51
Motif name:	INSM1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0844808

Alignment:
MGCCCCCTGMCA
-DCCACGTGCV-

Original motif Consensus sequence: TGYCAGGGGGCR

Reverse complement motif Consensus sequence: MGCCCCCTGMCA

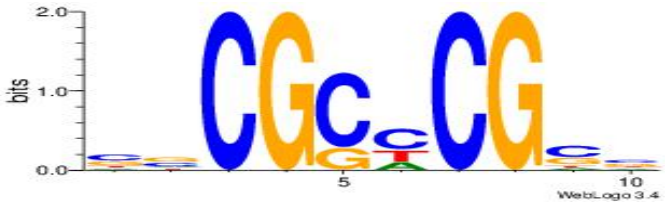


Dataset #:	4
Motif ID:	65
Motif name:	ssCGrGCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0859376

Alignment:
VBCGCMCGSV
VGCACGTGGH

Original motif Consensus sequence: VSCGRGCGBV

Reverse complement motif Consensus sequence: VBCGCMCGSV

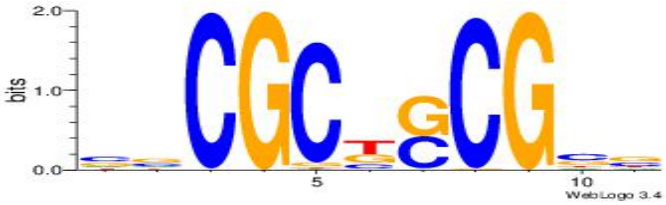


Dataset #:	4
Motif ID:	94
Motif name:	ssCGCksCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0876214

Alignment:

```
VVCGCKSCGBB
VGCACGTGGH-
```

Original motif Consensus sequence: VVCGCKSCGBB



Reverse complement motif Consensus sequence: BBCGSRGCGVV

Dataset #:	3
Motif ID:	52

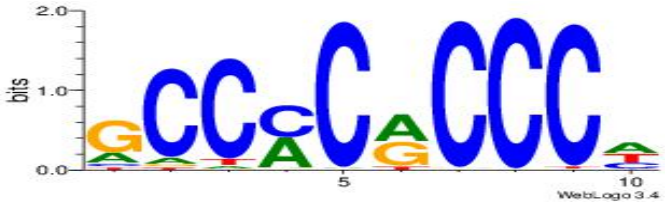
Motif name:	Klf4
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0883745

Alignment:

```
DGGGYGKGGC
VGCACGTGGH
```

Original motif Consensus sequence: DGGGYGKGGC

Reverse complement motif Consensus sequence: GCCYCMCCCD



Dataset #:	4
Motif ID:	72
Motif name:	ssCKCwsCGss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0918906

Alignment:
VBCGSWGCGVB
-DCCACGTGCV

Original motif Consensus sequence: BVCGCWSCGBV

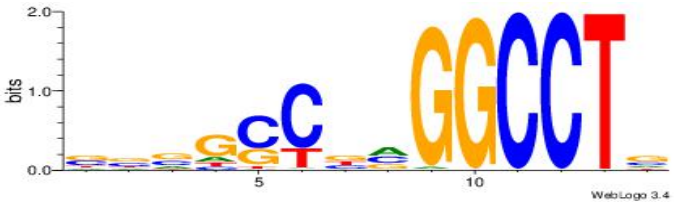
Reverse complement motif Consensus sequence: VBCGSWGCGVB

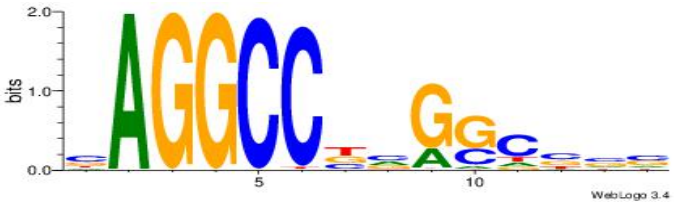
Dataset #:	3
Motif ID:	28
Motif name:	Zfx
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0925451

Alignment:
VAGGCCBBGGCVBB
---DCCACGTGCV-

Original motif Consensus sequence: BBVGCCBVGGCCTV

Reverse complement motif Consensus sequence: VAGGCCBBGGCVB

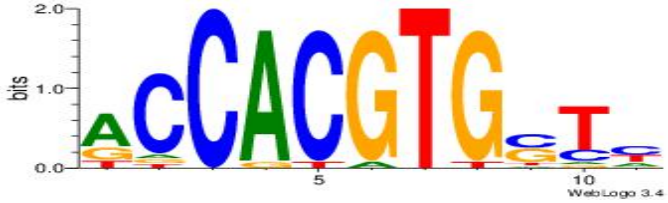




Dataset #: 3 Motif ID: 55 Motif name: MYCMAX

Original motif Consensus sequence: RASCACGTGGT

Reverse complement motif Consensus sequence: ACCACGTGSTM



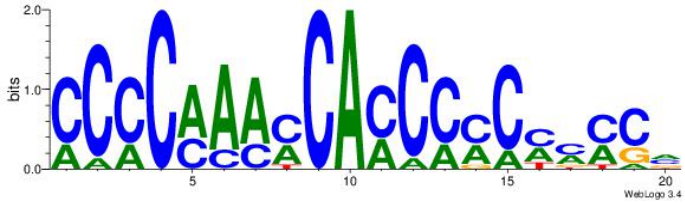
Best Matches for Motif ID 55 (Highest to Lowest)

Dataset #:	3
Motif ID:	34
Motif name:	RREB1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	7
Number of overlap:	11
Similarity score:	0.0862644

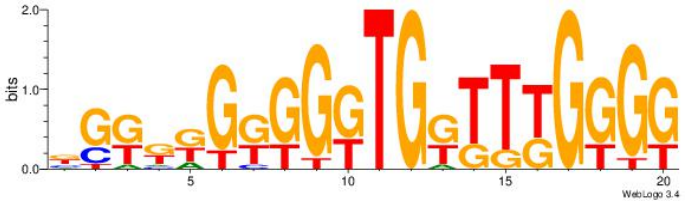
Alignment:

```
CCCCMAAMCAMCCMCMMMCV
---ACCACGTGSTM------
```

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG

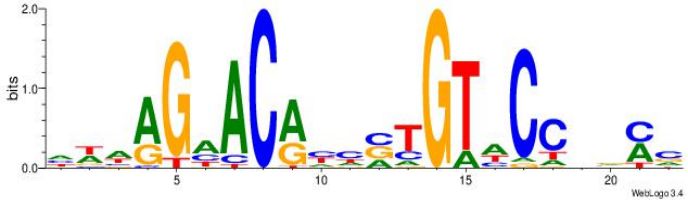


Dataset #:	3
Motif ID:	40
Motif name:	Ar
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	10
Number of overlap:	11
Similarity score:	0.0877525

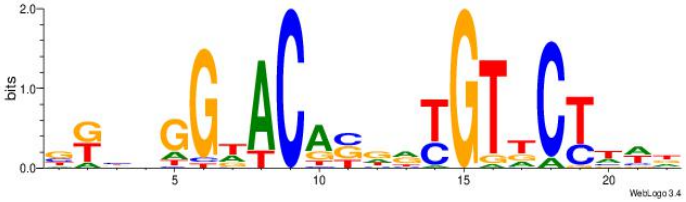
Alignment:

```
HWDAGHACRHHVTGTHCCHVMV
--RASCACGTGGT---------
```

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH

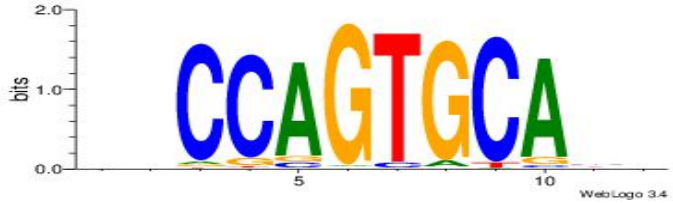


Dataset #:	4
Motif ID:	103
Motif name:	ccCCAGTGCAbr
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	11
Similarity score:	0.0902864

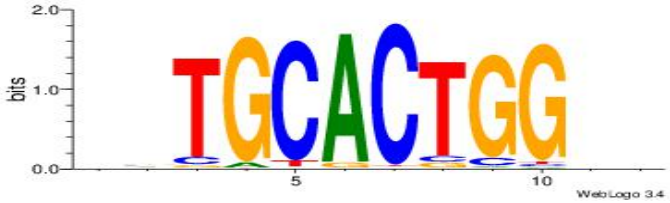
Alignment:

```
HVCCAGTGCABD
ACCACGTGSTM-
```

Original motif Consensus sequence: HVCCAGTGCABD



Reverse complement motif Consensus sequence: DBTGCACTGGVD

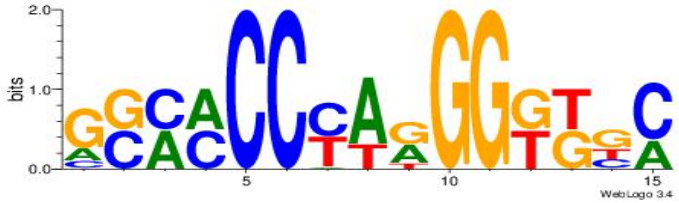


Dataset #:	3
Motif ID:	29
Motif name:	Zfp423
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	11

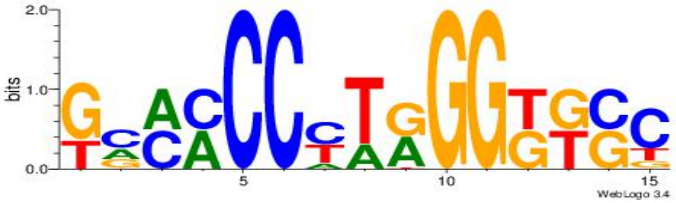
Similarity score: 0.0933483

Alignment:
GSMMCCYARGGKKKC
-ACCACGTGSTM---

Original motif Consensus sequence: GSMMCCYARGGKKKC



Reverse complement motif Consensus sequence: GYRYCCMTKGGYR

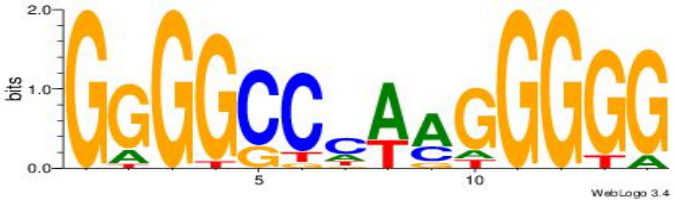


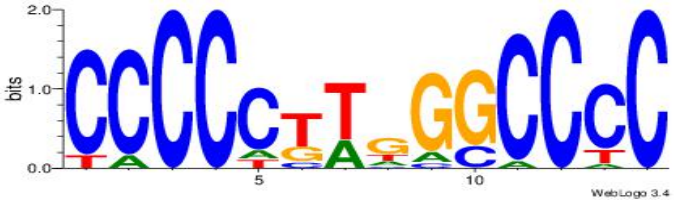
Dataset #: 3
Motif ID: 37
Motif name: PLAG1
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 1
Number of overlap: 11
Similarity score: 0.10358

Alignment:
CCCCCTTGGGCCCC
ACCACGTGSTM---

Original motif Consensus sequence: GGGGCCCAAGGGGG

Reverse complement motif Consensus sequence: CCCCCTTGGGCCC





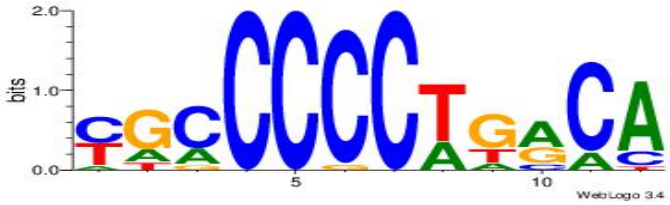
Dataset #:	3
Motif ID:	51
Motif name:	INSM1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.104527

Alignment:

```
TGYCAGGGGGCR
RASCACGTGGT-
```

Original motif Consensus sequence: TGYCAGGGGGCR

Reverse complement motif Consensus sequence: MGCCCCCTGMCA



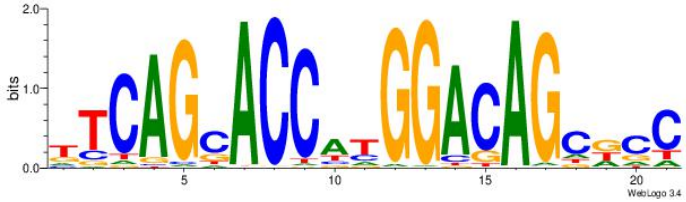
Dataset #:	3
Motif ID:	35

Motif name:	REST
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.105174

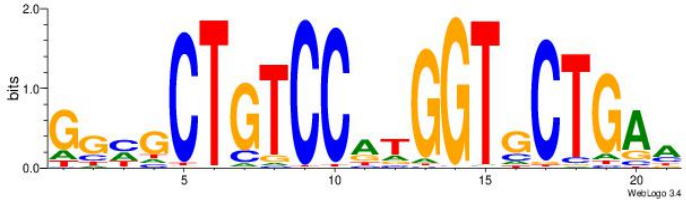
Alignment:

```
GGYGCTGTCCATGGTGCTGAA
--------ACCACGTGSTM--
```

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC



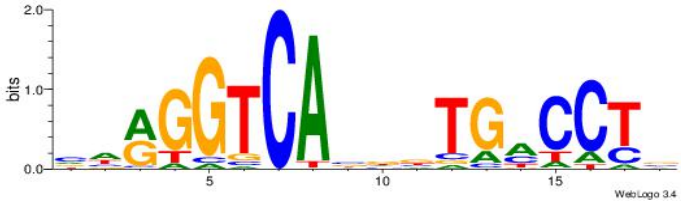
Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA



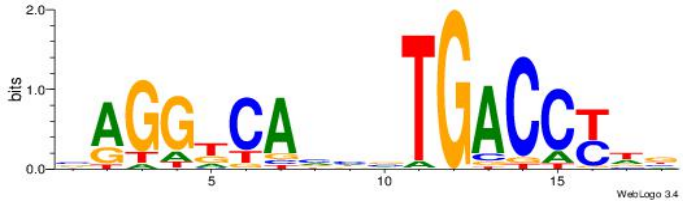
Dataset #:	3
Motif ID:	46
Motif name:	ESR2
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	11
Similarity score:	0.105681

Alignment:
VHRGGTCABDBTGMCCTB
---RASCACGTGGT----

Original motif Consensus sequence: VHRGGTCABDBTGMCCTB



Reverse complement motif Consensus sequence:
BAGGYCABHBTGACCKHV

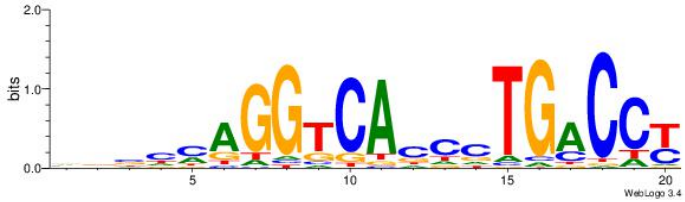


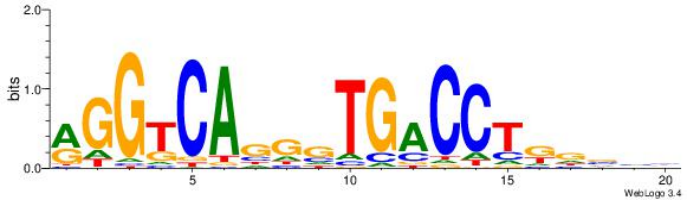
Dataset #:	3
Motif ID:	45
Motif name:	ESR1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	11
Similarity score:	0.107782

Alignment:
MGGTCAGGGTGACCTRDBHV
--------ACCACGTGSTM-

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY

Reverse complement motif Consensus sequence:
MGGTCAGGGTGACCTRDBHV



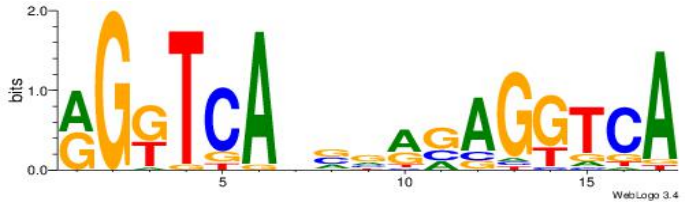


Dataset #:	3
Motif ID:	63
Motif name:	RXRRAR_DR5
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.108615

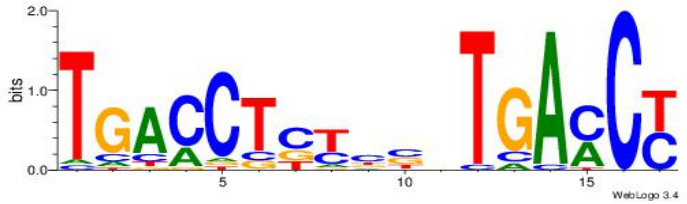
Alignment:

```
TGACCTCKVVBTGAYCK
--ACCACGTGSTM----
```

Original motif Consensus sequence: RGKTCABVVRGAGGTCA



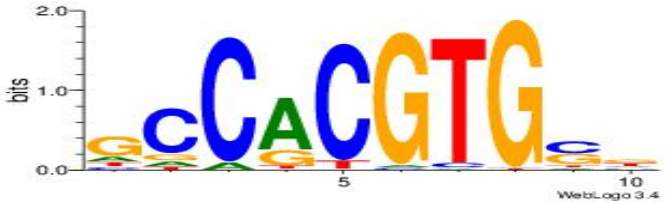
Reverse complement motif Consensus sequence: TGACCTCKVVBTGAYCK



Dataset #: 3 Motif ID: 56 Motif name: Mycn

Original motif Consensus sequence: HSCACGTGGC

Reverse complement motif Consensus sequence: GCCACGTGSD



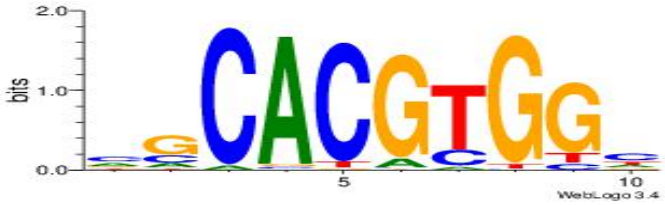
Best Matches for Motif ID 56 (Highest to Lowest)

Dataset #:	3
Motif ID:	54
Motif name:	Myc
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0

Alignment:

```
VGCACGTGGH
HSCACGTGGC
```

Original motif Consensus sequence: VGCACGTGGH



Reverse complement motif Consensus sequence: DCCACGTGCV

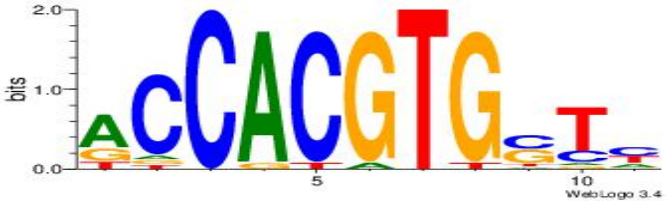
Dataset #:	3
Motif ID:	55
Motif name:	MYCMAX
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	10
Similarity score:	0.0200467

Alignment:

```
RASCACGTGGT
-HSCACGTGGC
```

Original motif Consensus sequence: RASCACGTGGT

Reverse complement motif Consensus sequence: ACCACGTGSTM

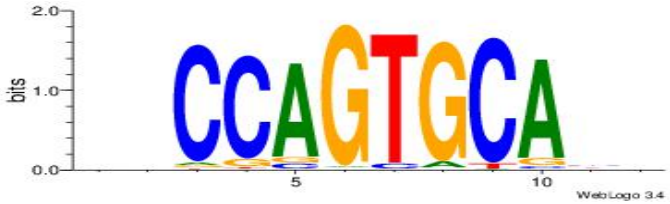


Dataset #:	4
Motif ID:	103
Motif name:	ccCCAGTGCAbr
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	10

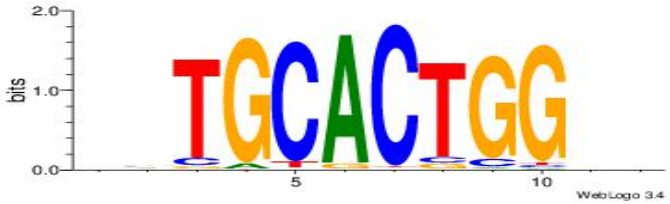
Similarity score: 0.0746307

Alignment:
HVCCAGTGCABD
GCCACGTGSD--

Original motif Consensus sequence: HVCCAGTGCABD



Reverse complement motif Consensus sequence: DBTGCACTGGVD



Dataset #: 4
Motif ID: 66
Motif name: ssCGssCGss
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 10
Similarity score: 0.0794648

Alignment:
BSCGSSCGSV
HSCACGTGGC

Original motif Consensus sequence: BSCGSSCGSV

Reverse complement motif Consensus sequence: VSCGSSCGSB

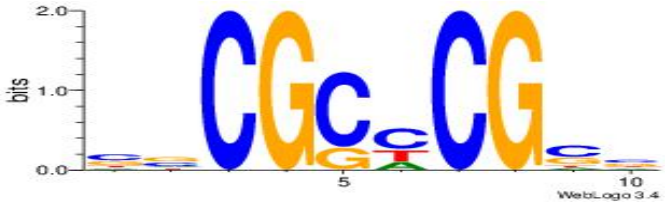
Dataset #:	4
Motif ID:	65
Motif name:	ssCGrGCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0833782

Alignment:

```
VBCGCMCGSV
HSCACGTGGC
```

Original motif Consensus sequence: VSCGRGCGBV

Reverse complement motif Consensus sequence: VBCGCMCGSV



Dataset #:	3
Motif ID:	51

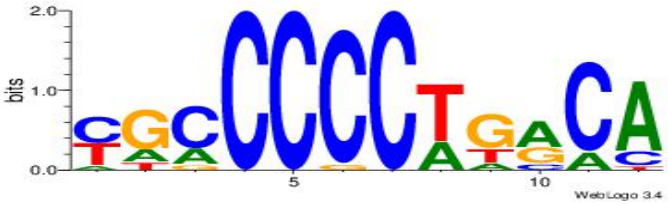
Motif name:	INSM1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0834824

Alignment:

```
MGCCCCCTGMCA
-GCCACGTGSD-
```

Original motif Consensus sequence: TGYCAGGGGGCR

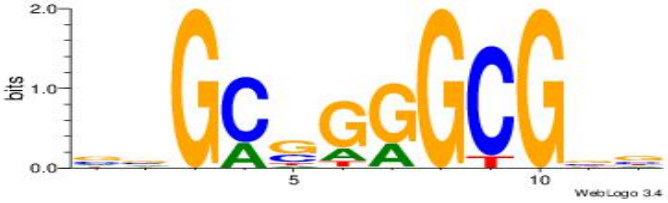
Reverse complement motif Consensus sequence: MGCCCCCTGMCA



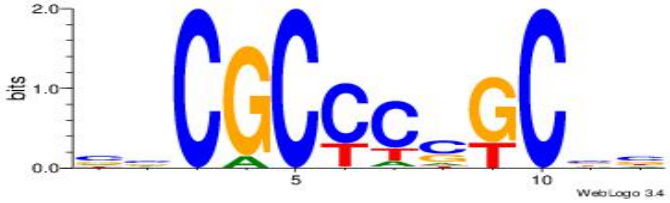
Dataset #:	4
Motif ID:	67
Motif name:	ssGMsGRGCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0872684

Alignment:
BBCGCCCSGCVV
HSCACGTGGC--

Original motif Consensus sequence: VVGCSGGGCGBB



Reverse complement motif Consensus sequence: BBCGCCCSGCVV

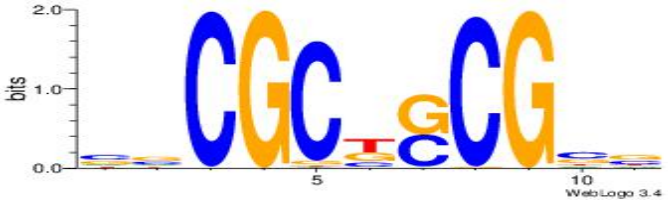


Dataset #:	4
Motif ID:	94
Motif name:	ssCGCksCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0886917

Alignment:
VVCGCKSCGBB
HSCACGTGGC-

Original motif Consensus sequence: VVCGCKSCGBB

Reverse complement motif Consensus sequence: BBCGSRGCGVV



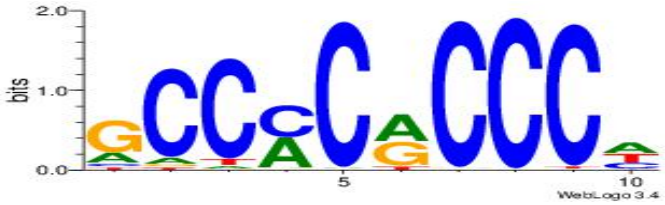
Dataset #:	3
Motif ID:	52
Motif name:	Klf4
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0893272

Alignment:

```
DGGGYGKGGC
HSCACGTGGC
```

Original motif Consensus sequence: DGGGYGKGGC

Reverse complement motif Consensus sequence: GCCYCMCCCD



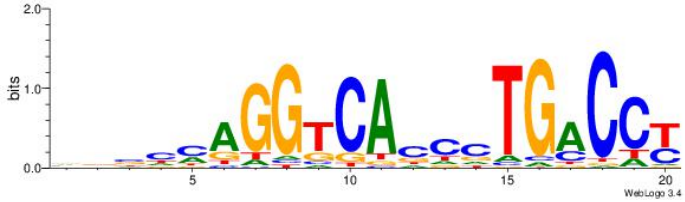
Dataset #:	3
Motif ID:	45

Motif name:	ESR1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	10
Similarity score:	0.089863

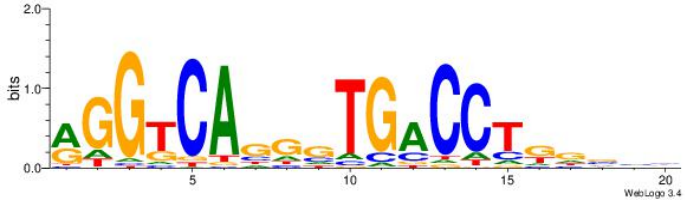
Alignment:

```
MGGTCAGGGTGACCTRDBHV
--------GCCACGTGSD--
```

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY



Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV



Dataset #: 3 Motif ID: 57 Motif name: MZF1_5-13

Original motif Consensus sequence: BKAGGGGDAD

Reverse complement motif Consensus sequence: BTHCCCCTYB

Best Matches for Motif ID 57 (Highest to Lowest)

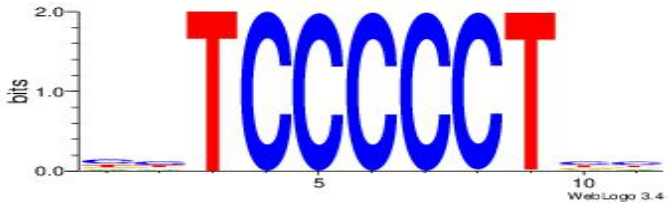
Dataset #:	4
Motif ID:	93
Motif name:	rrAGGGGGArr
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0129746

Alignment:

```
VVAGGGGGAVV
BKAGGGGDAD-
```

Original motif Consensus sequence: VVAGGGGGAVV

Reverse complement motif Consensus sequence: VVTCCCCCTVV



Dataset #:	3
Motif ID:	51
Motif name:	INSM1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif

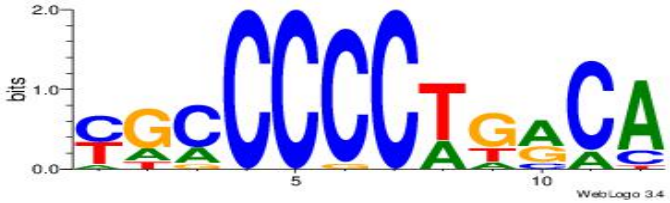
Direction:	Forward
Position number:	3
Number of overlap:	10
Similarity score:	0.0360532

Alignment:

```
TGYCAGGGGGCR
--BKAGGGGDAD
```

Original motif Consensus sequence: TGYCAGGGGGCR

Reverse complement motif Consensus sequence: MGCCCCCTGMCA

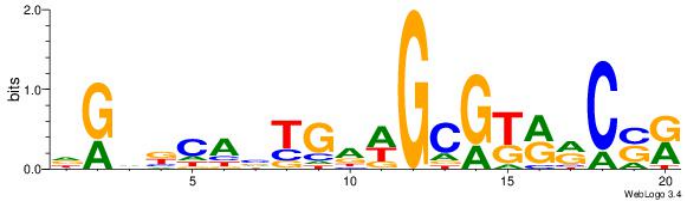


Dataset #:	3
Motif ID:	61
Motif name:	Pax5
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	10
Similarity score:	0.0428241

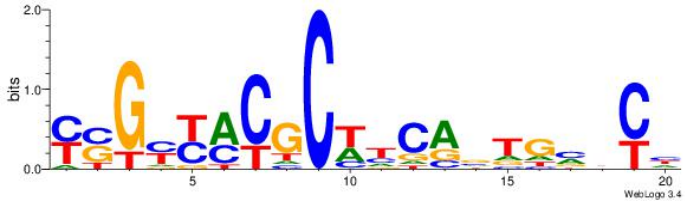
Alignment:

```
DGVBCABTGDWGCGKRRCSR
-------BKAGGGGDAD---
```

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR



Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD

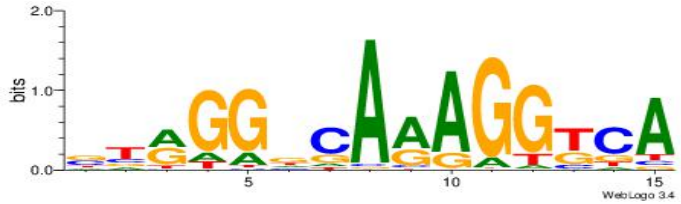


Dataset #:	3
Motif ID:	36
Motif name:	PPARGRXRA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0470779

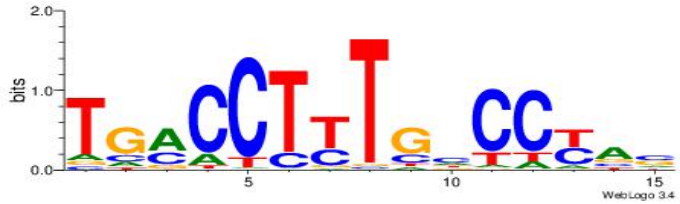
Alignment:

```
BTRGGDCARAGGKCA
BKAGGGGDAD-----
```

Original motif Consensus sequence: BTRGGDCARAGGKCA



Reverse complement motif Consensus sequence: TGRCCTKTGHCCK

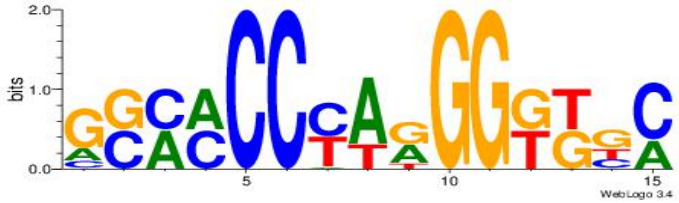


Dataset #:	3
Motif ID:	29
Motif name:	Zfp423
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	10
Similarity score:	0.0524832

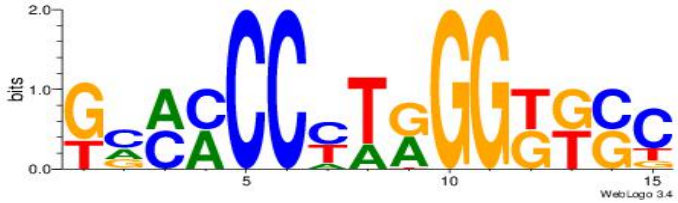
Alignment:

```
GSMMCCYARGGKKKC
-----BKAGGGGDAD
```

Original motif Consensus sequence: GSMMCCYARGGKKKC



Reverse complement motif Consensus sequence: GYRYCCMTKGGYR

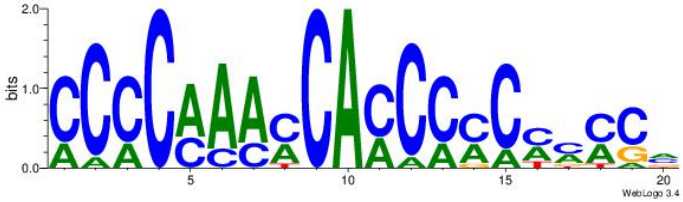


Dataset #:	3
Motif ID:	34
Motif name:	RREB1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	10

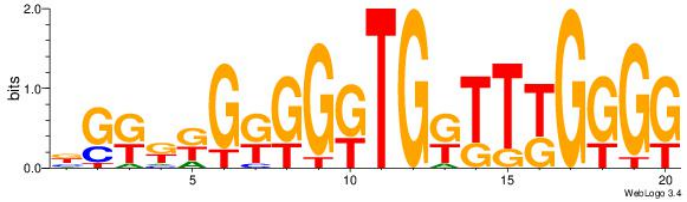
Similarity score: 0.0548506

Alignment:
CCCCMAAMCAMCCMCMMMCV
-BTHCCCCTYB---------

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG

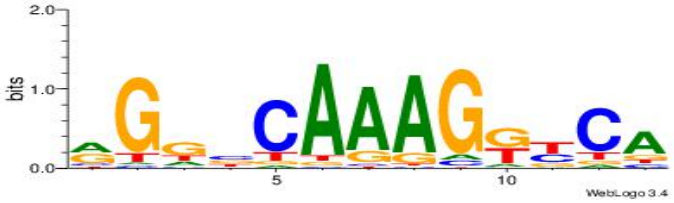


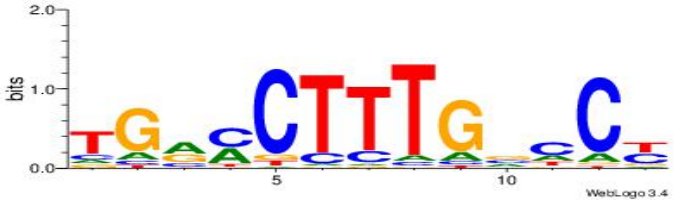
Dataset #: 3
Motif ID: 50
Motif name: HNF4A
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 1
Number of overlap: 10
Similarity score: 0.0568244

Alignment:
TGMYCTTTGBCCK
BTHCCCCTYB---

Original motif Consensus sequence: RGGBCAAAGKYCA

Reverse complement motif Consensus sequence: TGMYCTTTGBCCK



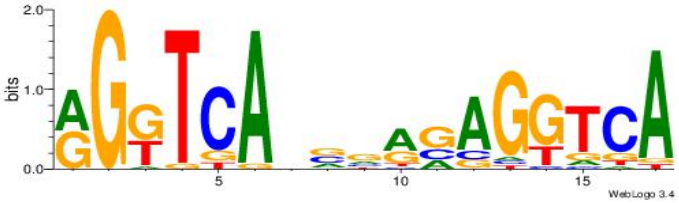


Dataset #:	3
Motif ID:	63
Motif name:	RXRRAR_DR5
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0581547

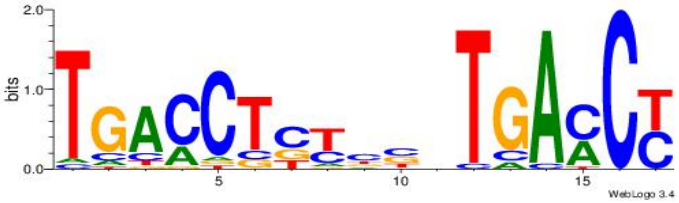
Alignment:

```
TGACCTCKVVBTGAYCK
BTHCCCCTYB-------
```

Original motif Consensus sequence: RGKTCABVVRGAGGTCA



Reverse complement motif Consensus sequence: TGACCTCKVVBTGAYCK



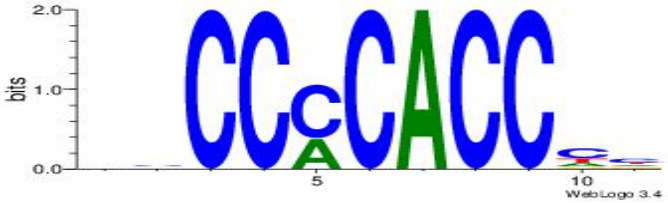
Dataset #: 4

Motif ID:	89
Motif name:	ccCCmCACCcc
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0584071

Alignment:

```
DDGGTGRGGBD
-BKAGGGGDAD
```

Original motif Consensus sequence: HBCCMCACCHH



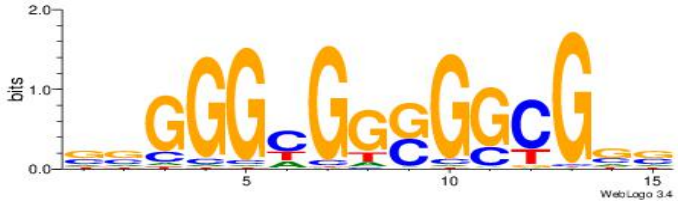
Reverse complement motif Consensus sequence: DDGGTGRGGBD

Dataset #:	4
Motif ID:	91
Motif name:	ssCGCCsCCrCCCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	10
Similarity score:	0.0606698

Alignment:
SSGGGCGGSGGCGSS
BKAGGGGDAD-----

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS



Dataset #: 3 Motif ID: 58 Motif name: NFKB1

Original motif Consensus sequence: GGGGRTTCCCC

Reverse complement motif Consensus sequence: GGGGAAKCCCC

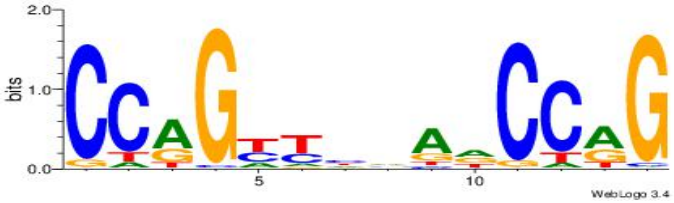
Best Matches for Motif ID 58 (Highest to Lowest)

Dataset #:	3
Motif ID:	64
Motif name:	Tcfcp2l1
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward

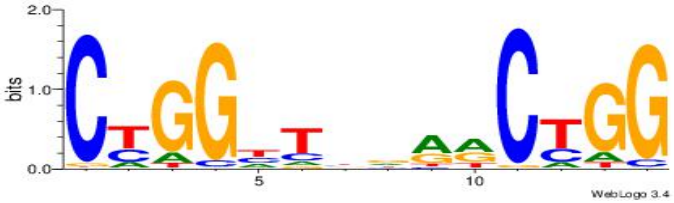
Position number: 4
Number of overlap: 11
Similarity score: 0.103405

Alignment:
CKGGDTBDMMCTGG
GGGGRTTCCCC---

Original motif Consensus sequence: CCAGYYHVADCCRG



Reverse complement motif Consensus sequence: CKGGDTBDMMCT

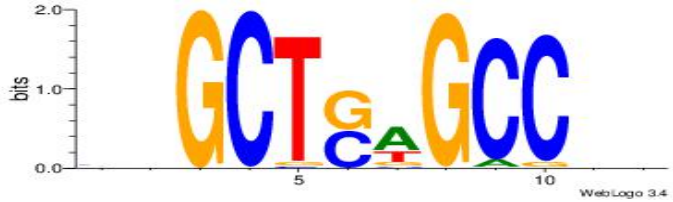


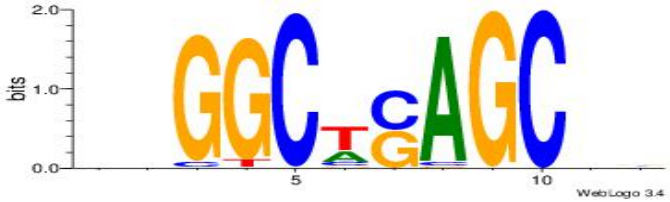
Dataset #: 4
Motif ID: 77
Motif name: ssGCTswGCCms
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 2
Number of overlap: 11
Similarity score: 0.108087

Alignment:
VBGCTSAGCCHB
-GGGGAAKCCCC

Original motif Consensus sequence: VBGCTSAGCCHB

Reverse complement motif Consensus sequence: BDGGCTSAGCBV

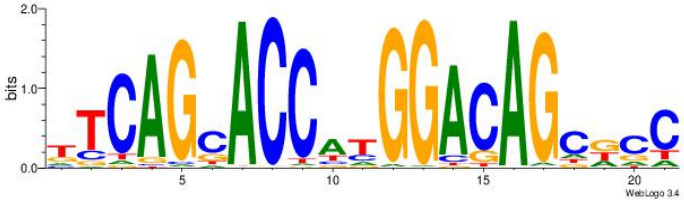




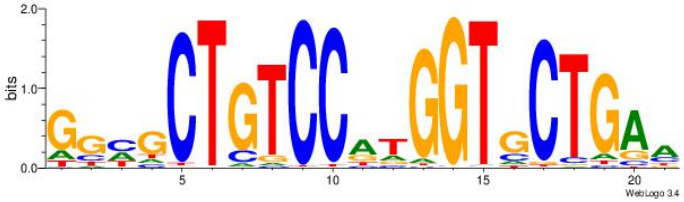
Dataset #: 3
Motif ID: 35
Motif name: REST
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 11
Similarity score: 0.112926

Alignment:
TTCAGCACCATGGACAGCKCC
GGGGAAKCCCC----------

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC



Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA



Dataset #: 4

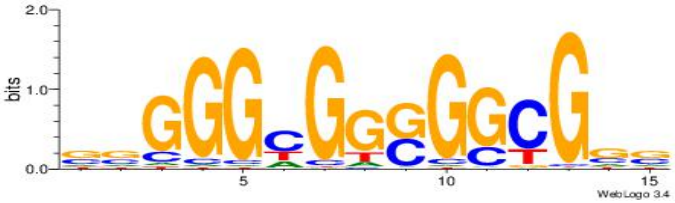
Motif ID:	91
Motif name:	ssCGCCsCCrCCCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	11
Similarity score:	0.113723

Alignment:

```
SSCGCCSCCGCCCSS
---GGGGAAKCCCC-
```

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS

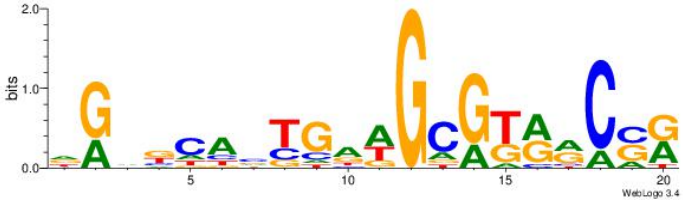


Dataset #:	3
Motif ID:	61
Motif name:	Pax5
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	11

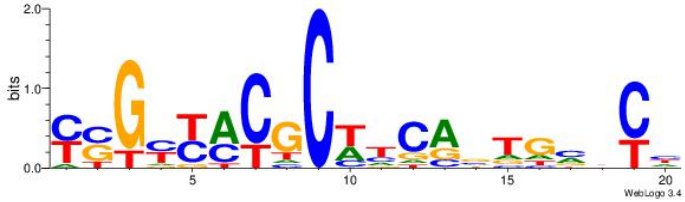
Similarity score: 0.116162

Alignment:
MSGKKRCGCWDCABTGBBCD
-GGGGAAKCCCC--------

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR



Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD

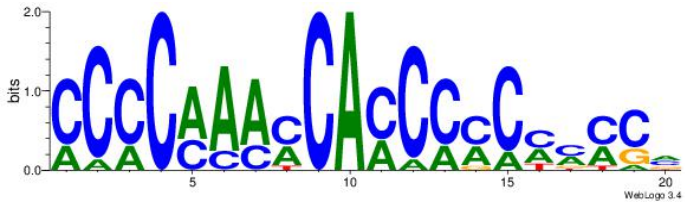


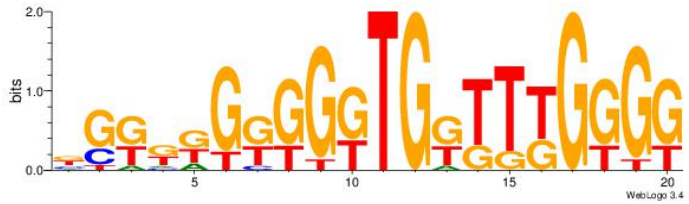
Dataset #: 3
Motif ID: 34
Motif name: RREB1
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 5
Number of overlap: 11
Similarity score: 0.117826

Alignment:
CCCCMAAMCAMCCMCMMMCV
-----GGGGAAKCCCC----

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV

Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG



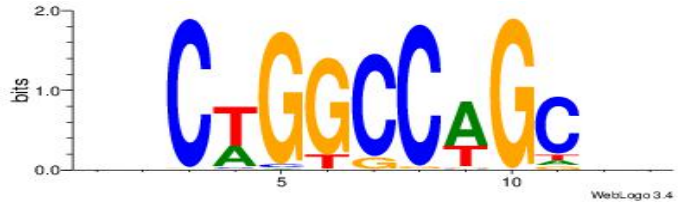


Dataset #:	4
Motif ID:	80
Motif name:	ssCwGGCCwGCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	10
Similarity score:	0.615517

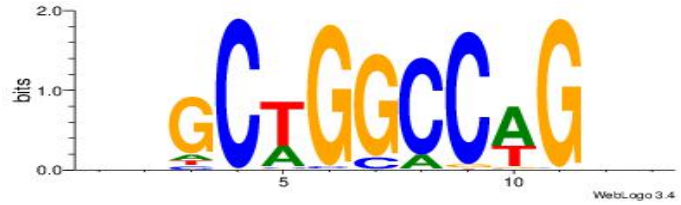
Alignment:

```
BBCWGGCCAGCBB-
---GGGGAAKCCCC
```

Original motif Consensus sequence: BBCWGGCCAGCBB



Reverse complement motif Consensus sequence: BBGCTGGCCWGBI



Dataset #:	3
Motif ID:	52

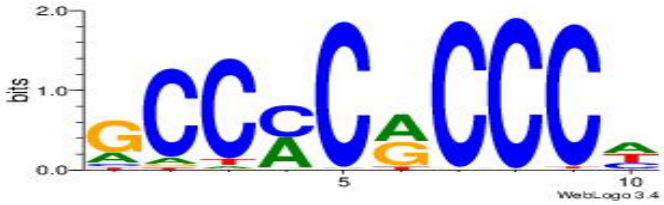
Motif name:	Klf4
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.616368

Alignment:

```
GCCYCMCCCD-
GGGGRTTCCCC
```

Original motif Consensus sequence: DGGGYGKGGC

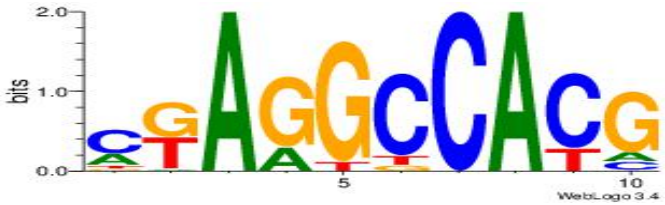
Reverse complement motif Consensus sequence: GCCYCMCCCD



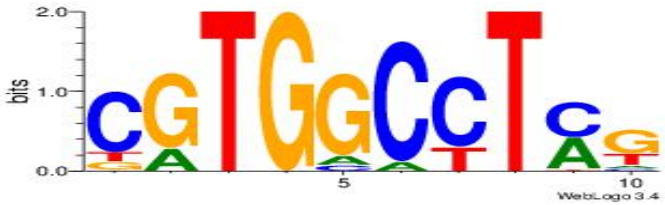
Dataset #:	4
Motif ID:	70
Motif name:	mkARGCCACG
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	9
Similarity score:	1.10675

Alignment:
--CKAGGCCACG
GGGGAAKCCCC-

Original motif Consensus sequence: CKAGGCCACG



Reverse complement motif Consensus sequence: CGTGGCCTYG

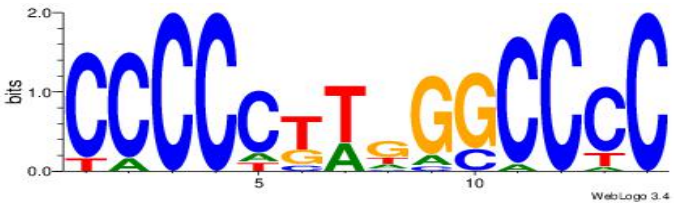


Dataset #:	3
Motif ID:	37
Motif name:	PLAG1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	9
Similarity score:	1.11497

Alignment:
--GGGGCCCAAGGGGG
GGGGRTTCCCC-----

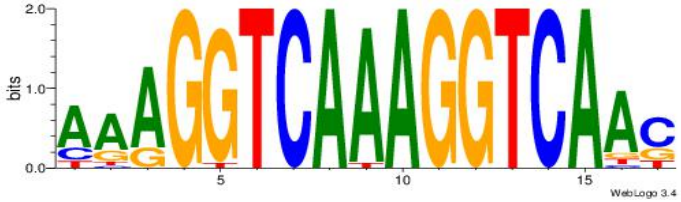
Original motif Consensus sequence: GGGGCCCAAGGGGG

Reverse complement motif Consensus sequence: CCCCCTTGGGCCC

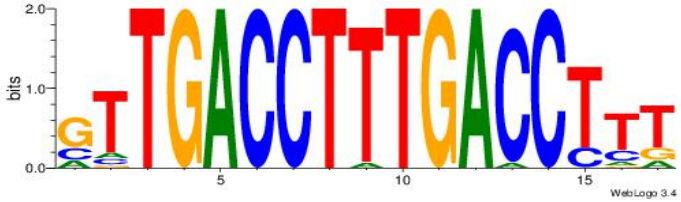


Dataset #: 3 Motif ID: 59 Motif name: NR1H2RXRA

Original motif Consensus sequence: AAAGGTCAAAGGTCAAC



Reverse complement motif Consensus sequence: GTTGACCTTTGACCTTT



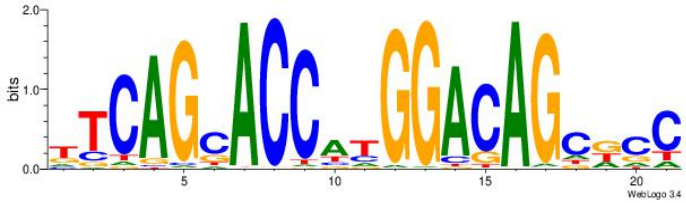
Best Matches for Motif ID 59 (Highest to Lowest)

Dataset #:	3
Motif ID:	35
Motif name:	REST
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	17
Similarity score:	0.0911991

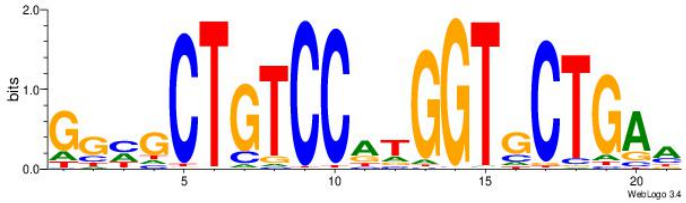
Alignment:

GGYGCTGTCCATGGTGCTGAA
---GTTGACCTTTGACCTTT-

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC



Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA

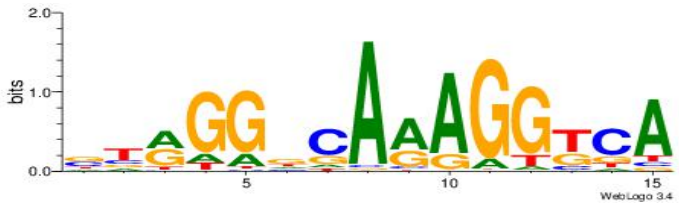


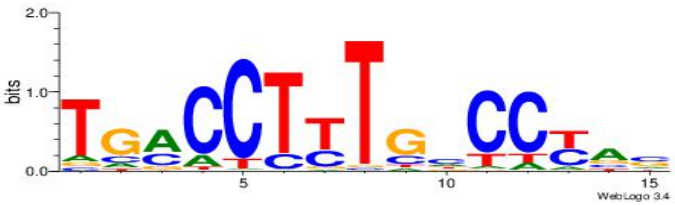
Dataset #:	3
Motif ID:	36
Motif name:	PPARGRXRA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	15
Similarity score:	1.05945

Alignment:
BTRGGDCARAGGKCA--
AAAGGTCAAAGGTCAAC

Original motif Consensus sequence: BTRGGDCARAGGKCA

Reverse complement motif Consensus sequence: TGRCCTKTGHCCK





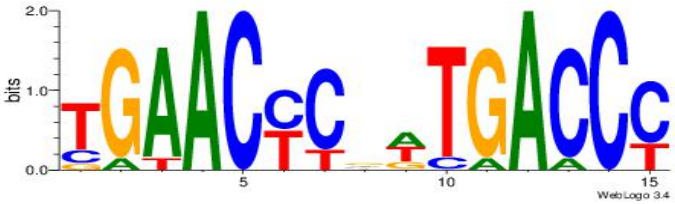
Dataset #:	3
Motif ID:	33
Motif name:	RXRAVDR
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	15
Similarity score:	1.09792

Alignment:

```
--GGGTCAWBGRGTTCA
AAAGGTCAAAGGTCAAC
```

Original motif Consensus sequence: GGGTCAWBGRGTTCA

Reverse complement motif Consensus sequence: TGAACKCBWTGAC



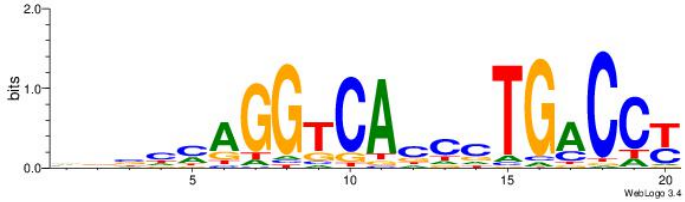
Dataset #:	3
Motif ID:	45

Motif name:	ESR1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	8
Number of overlap:	13
Similarity score:	2.08514

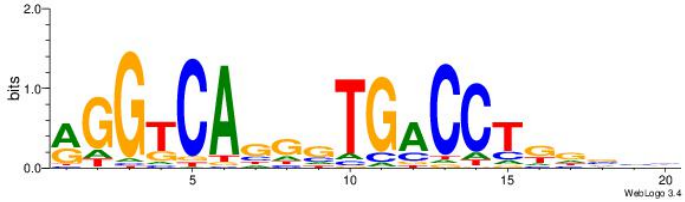
Alignment:

```
----VDBHMAGGTCACCCTGACCY
AAAGGTCAAAGGTCAAC-------
```

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY



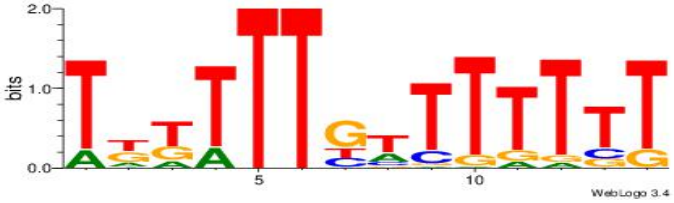
Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV



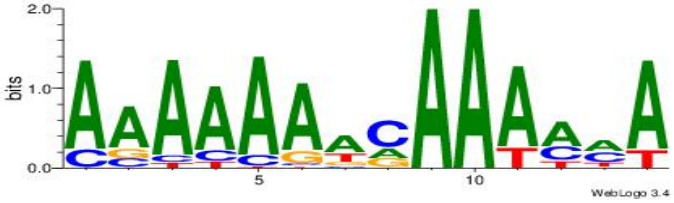
Dataset #:	2
Motif ID:	26
Motif name:	Motif 26
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	13
Similarity score:	2.08845

Alignment:
TKKTTTGTTTTTTT----
-GTTGACCTTTGACCTTT

Original motif Consensus sequence: TKKTTTGTTTTTTT



Reverse complement motif Consensus sequence: AAAAAAACAAARR

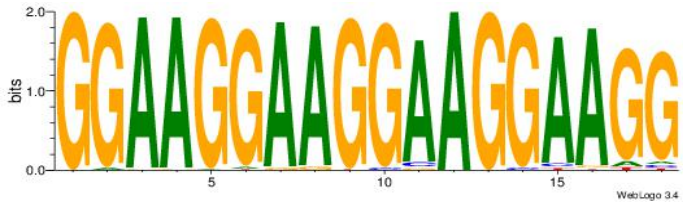


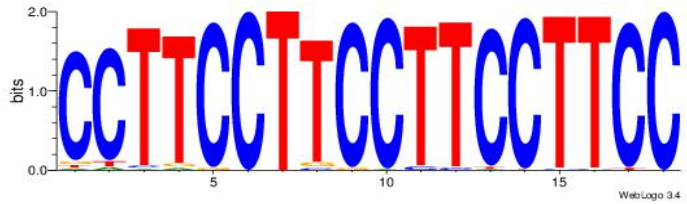
Dataset #:	3
Motif ID:	48
Motif name:	EWSR1-FLI1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	7
Number of overlap:	12
Similarity score:	2.59335

Alignment:
GGAAGGAAGGAAGGAAGG-----
------AAAGGTCAAAGGTCAAC

Original motif Consensus sequence: GGAAGGAAGGAAGGAAGG

Reverse complement motif Consensus sequence: CCTTCCTTCCTTCCTTCC

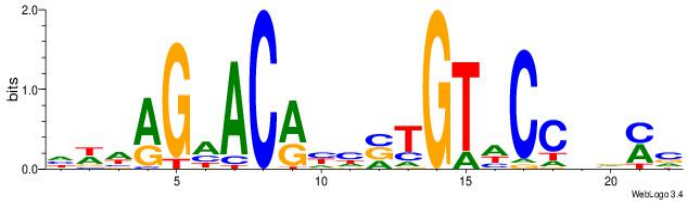




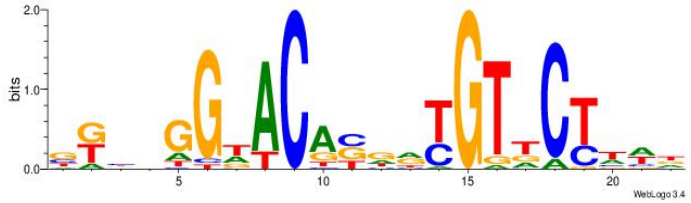
Dataset #: 3
Motif ID: 40
Motif name: Ar
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 12
Number of overlap: 11
Similarity score: 3.09595

Alignment:
VRVDGGHACAVDDKGTHCTDWH------
----------GTTGACCTTTGACCTTT

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH



Dataset #: 4

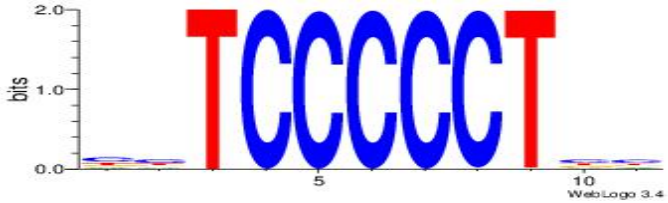
Motif ID:	93
Motif name:	rrAGGGGGArr
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	3.10003

Alignment:

```
VVAGGGGGAVV------
AAAGGTCAAAGGTCAAC
```

Original motif Consensus sequence: VVAGGGGGAVV

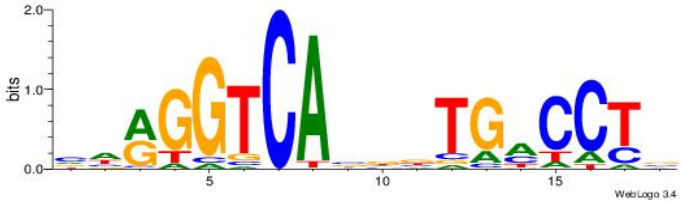
Reverse complement motif Consensus sequence: VVTCCCCCTVV



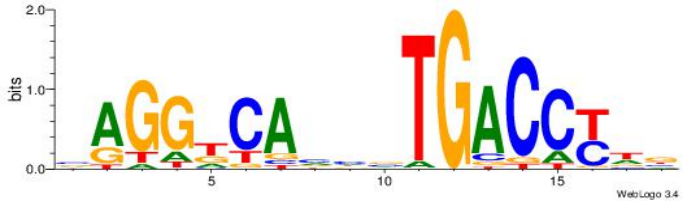
Dataset #:	3
Motif ID:	46
Motif name:	ESR2
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	9
Number of overlap:	10
Similarity score:	3.56221

Alignment:
-------VHRGGTCABDBTGMCCTB
AAAGGTCAAAGGTCAAC--------

Original motif Consensus sequence: VHRGGTCABDBTGMCCTB



Reverse complement motif Consensus sequence: BAGGYCABHBTGACCKHV

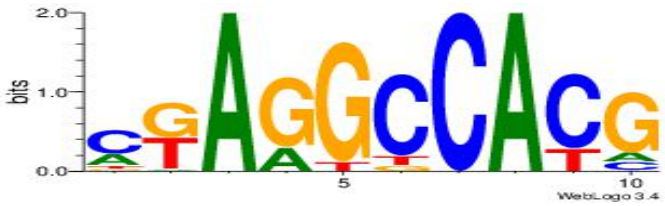


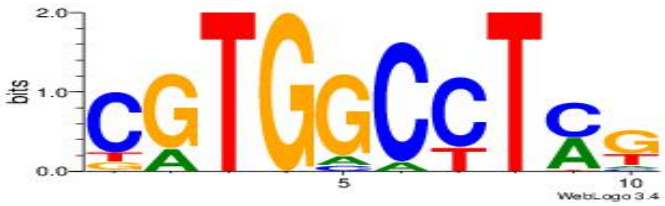
Dataset #:	4
Motif ID:	70
Motif name:	mkARGCCACG
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	3.57909

Alignment:
CGTGGCCTYG-------
GTTGACCTTTGACCTTT

Original motif Consensus sequence: CKAGGCCACG

Reverse complement motif Consensus sequence: CGTGGCCTYG





Dataset #: 3 Motif ID: 60 Motif name: NR4A2

Original motif Consensus sequence: AAGGTCAC

Reverse complement motif Consensus sequence: GTGACCTT

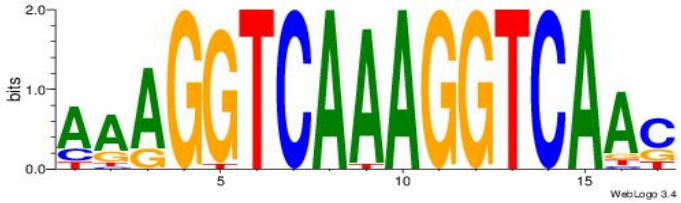
Best Matches for Motif ID 60 (Highest to Lowest)

Dataset #:	3
Motif ID:	59
Motif name:	NR1H2RXRA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	8
Similarity score:	0.0167759

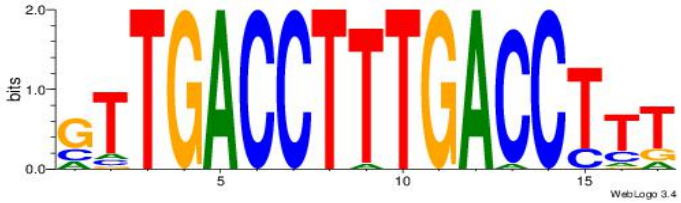
Alignment:

```
AAAGGTCAAAGGTCAAC
-AAGGTCAC--------
```

Original motif Consensus sequence: AAAGGTCAAAGGTCAAC



Reverse complement motif Consensus sequence: GTTGACCTTTGACCTTT

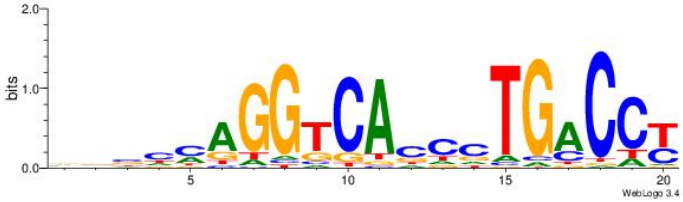


Dataset #:	3
Motif ID:	45
Motif name:	ESR1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	8
Similarity score:	0.0195235

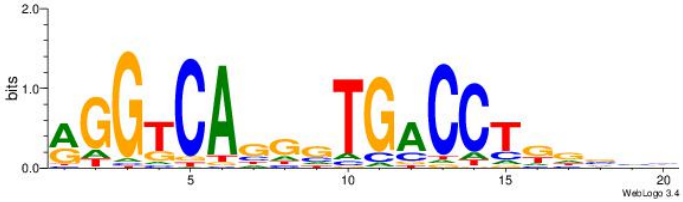
Alignment:

```
VDBHMAGGTCACCCTGACCY
----AAGGTCAC--------
```

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY



Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV

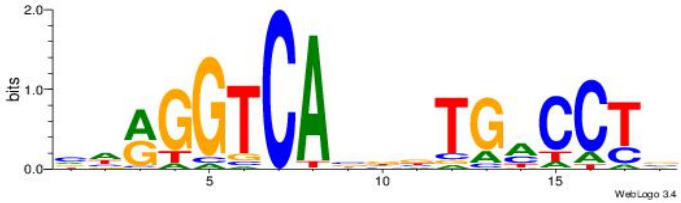


Dataset #:	3
Motif ID:	46
Motif name:	ESR2
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	8
Similarity score:	0.0198372

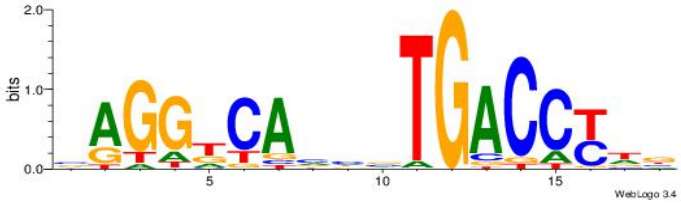
Alignment:

```
BAGGYCABHBTGACCKHV
---------GTGACCTT-
```

Original motif Consensus sequence: VHRGGTCABDBTGMCCTB



Reverse complement motif Consensus sequence: BAGGYCABHBTGACCKHV

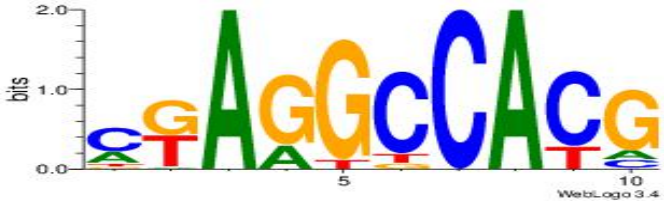


Dataset #:	4
Motif ID:	70
Motif name:	mkARGCCACG
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2

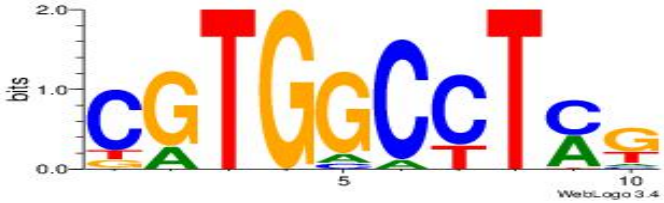
Number of overlap: 8
Similarity score: 0.0377428

Alignment:
CGTGGCCTYG
-GTGACCTT-

Original motif Consensus sequence: CKAGGCCACG



Reverse complement motif Consensus sequence: CGTGGCCTYG

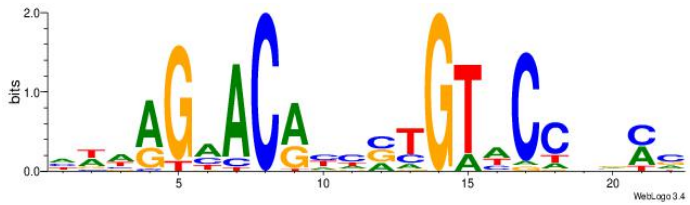


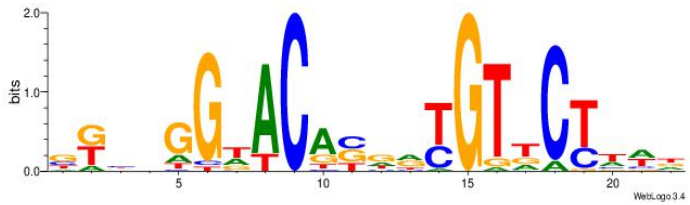
Dataset #: 3
Motif ID: 40
Motif name: Ar
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 13
Number of overlap: 8
Similarity score: 0.0487608

Alignment:
VRVDGGHACAVDDKGTHCTDWH
----------GTGACCTT--

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV

Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH



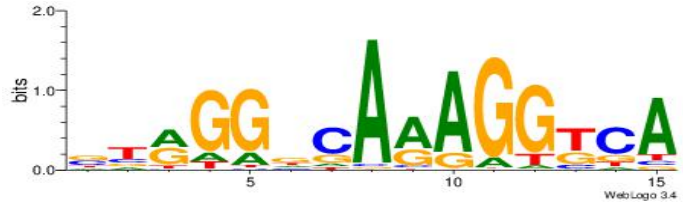


Dataset #:	3
Motif ID:	36
Motif name:	PPARGRXRA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	7
Number of overlap:	8
Similarity score:	0.0495607

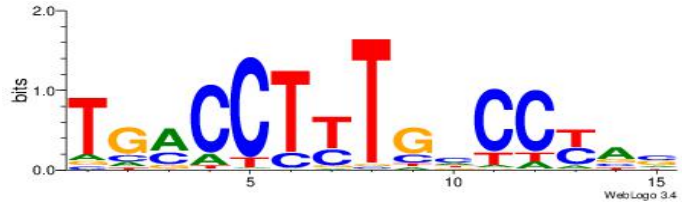
Alignment:

```
BTRGGDCARAGGKCA
-AAGGTCAC------
```

Original motif Consensus sequence: BTRGGDCARAGGKCA



Reverse complement motif Consensus sequence: TGRCCTKTGHCCK



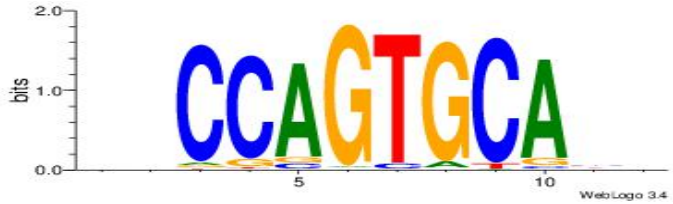
Dataset #:	4
Motif ID:	103

Motif name:	ccCCAGTGCAbr
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.0555579

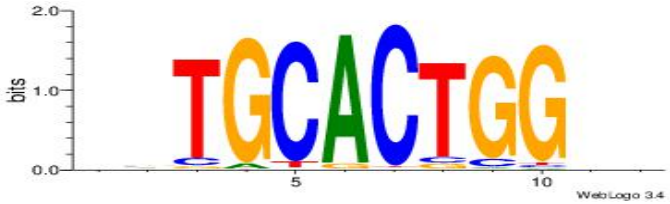
Alignment:

```
DBTGCACTGGVD
-GTGACCTT---
```

Original motif Consensus sequence: HVCCAGTGCABD



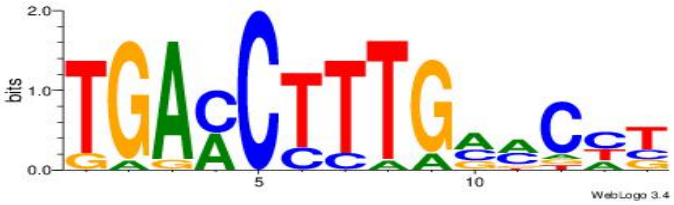
Reverse complement motif Consensus sequence: DBTGCACTGGVD



Dataset #:	3
Motif ID:	38
Motif name:	NR2F1
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	8
Similarity score:	0.0564874

Alignment:
AKGYYCAAAGRTCA
------AAGGTCAC

Original motif Consensus sequence: TGAMCTTTGMMCYT



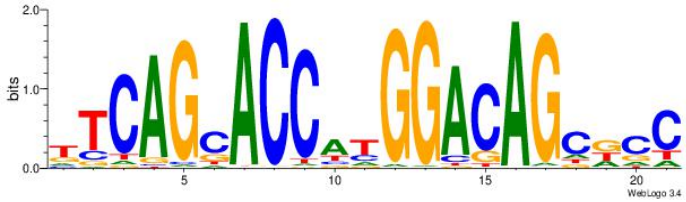
Reverse complement motif Consensus sequence: AKGYYCAAAGRTCA

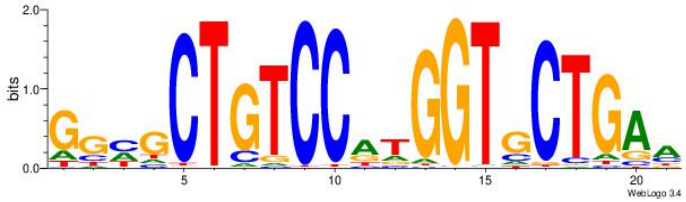
Dataset #:	3
Motif ID:	35
Motif name:	REST
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	8
Similarity score:	0.0594649

Alignment:
GGYGCTGTCCATGGTGCTGAA
----GTGACCTT---------

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC

Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA



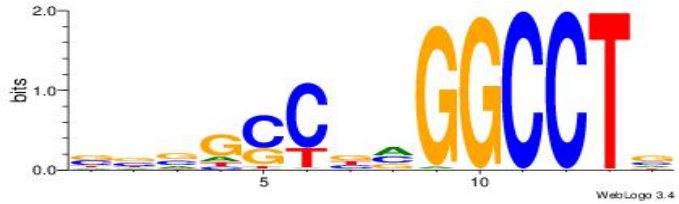


Dataset #:	3
Motif ID:	28
Motif name:	Zfx
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	8
Similarity score:	0.0631514

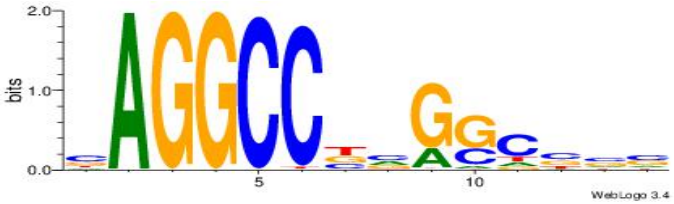
Alignment:

```
BBVGCCBVGGCCTV
GTGACCTT------
```

Original motif Consensus sequence: BBVGCCBVGGCCTV

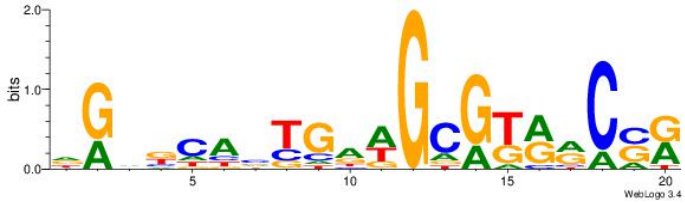


Reverse complement motif Consensus sequence: VAGGCCBBGGCVB

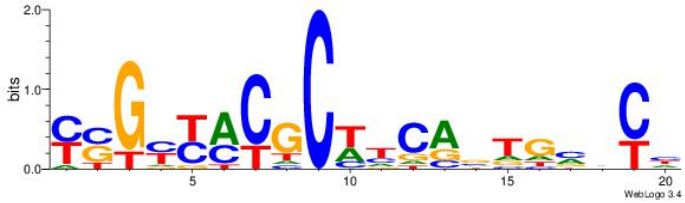


Dataset #: 3 Motif ID: 61 Motif name: Pax5

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR



Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD



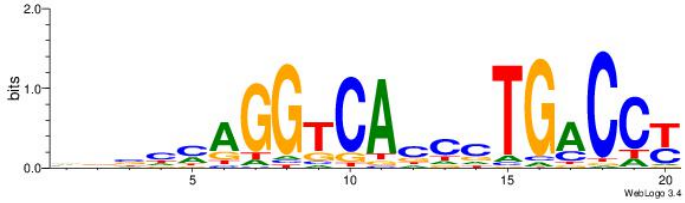
Best Matches for Motif ID 61 (Highest to Lowest)

Dataset #:	3
Motif ID:	45
Motif name:	ESR1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	20
Similarity score:	0.040879

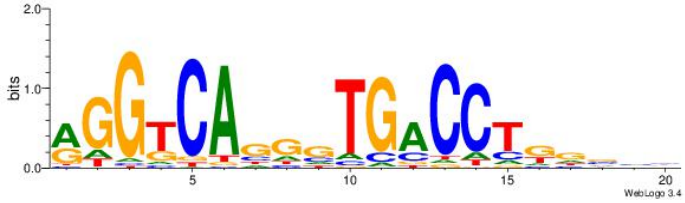
Alignment:

```
MGGTCAGGGTGACCTRDBHV
MSGKKRCGCWDCABTGBBCD
```

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY



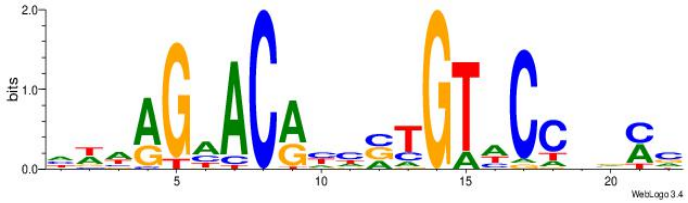
Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV



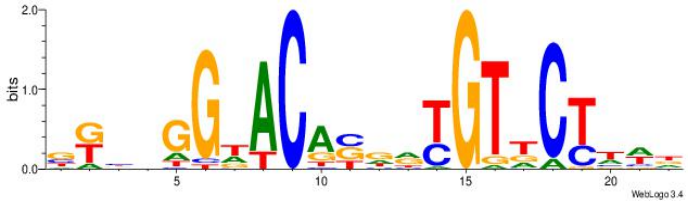
Dataset #: 3
Motif ID: 40
Motif name: Ar
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 1
Number of overlap: 20
Similarity score: 0.0477129

Alignment:
VRVDGGHACAVDDKGTHCTDWH
--MSGKKRCGCWDCABTGBBCD

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH

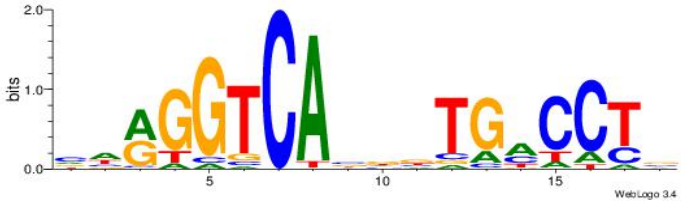


Dataset #: 3
Motif ID: 46
Motif name: ESR2
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward

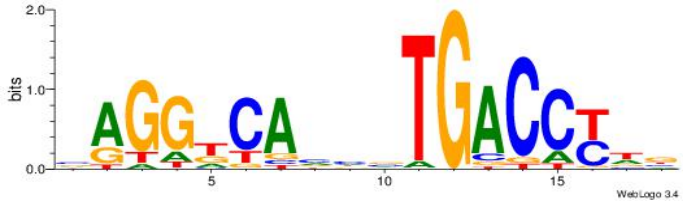
Position number: 1
Number of overlap: 18
Similarity score: 1.05456

Alignment:
BAGGYCABHBTGACCKHV--
MSGKKRCGCWDCABTGBBCD

Original motif Consensus sequence: VHRGGTCABDBTGMCCTB



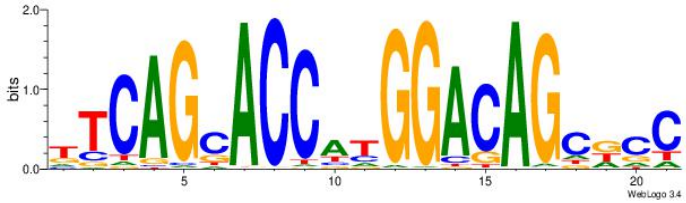
Reverse complement motif Consensus sequence: BAGGYCABHBTGACCKHV



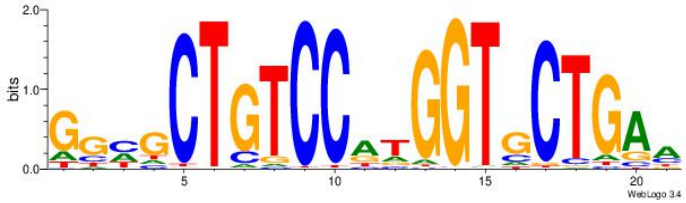
Dataset #: 3
Motif ID: 35
Motif name: REST
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 4
Number of overlap: 18
Similarity score: 1.06085

Alignment:
--GGYGCTGTCCATGGTGCTGAA
MSGKKRCGCWDCABTGBBCD---

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC



Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA

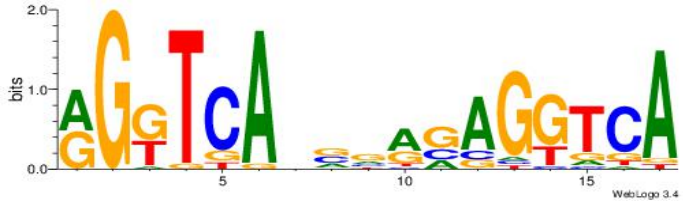


Dataset #:	3
Motif ID:	63
Motif name:	RXRRAR_DR5
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	17
Similarity score:	1.54082

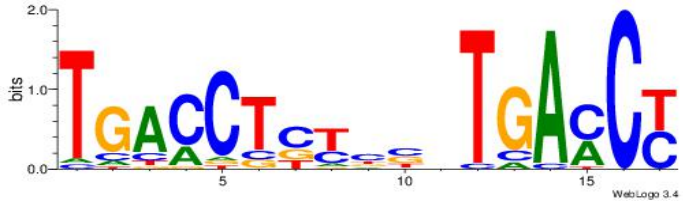
Alignment:

```
---TGACCTCKVVBTGAYCK
MSGKKRCGCWDCABTGBBCD
```

Original motif Consensus sequence: RGKTCABVVRGAGGTCA



Reverse complement motif Consensus sequence: TGACCTCKVVBTGAYCK

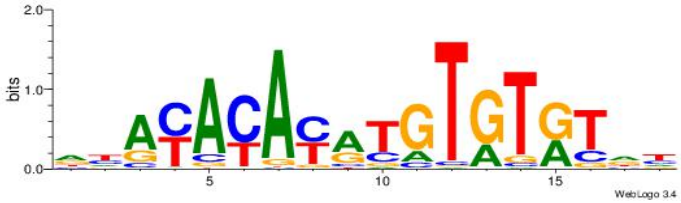


Dataset #:	4
Motif ID:	97
Motif name:	ryayAyAyrtGTRTrTry
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	17
Similarity score:	1.54834

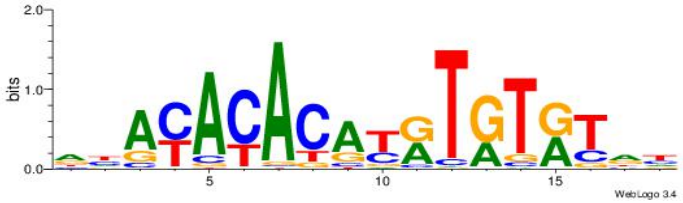
Alignment:

```
HDAMACACAKKTKTKTHD---
-DGVBCABTGDWGCGKRRCSR
```

Original motif Consensus sequence: DHAYAYAYRTGTGTRTDH



Reverse complement motif Consensus sequence: HDAMACACAKKTKTKTHD

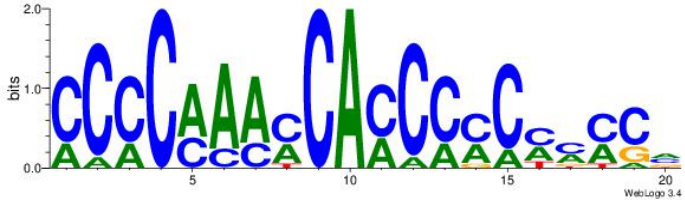


Dataset #:	3
Motif ID:	34
Motif name:	RREB1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4

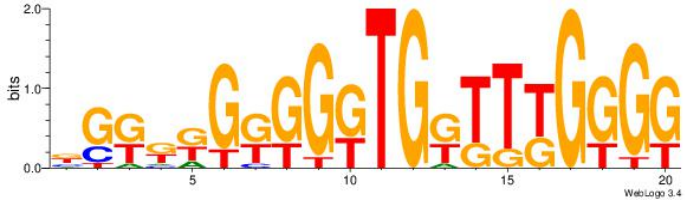
Number of overlap: 17
Similarity score: 1.56096

Alignment:
CCCCMAAMCAMCCMCMMMCV---
---MSGKKRCGCWDCABTGBBCD

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG

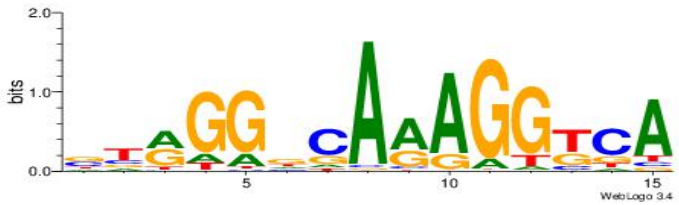


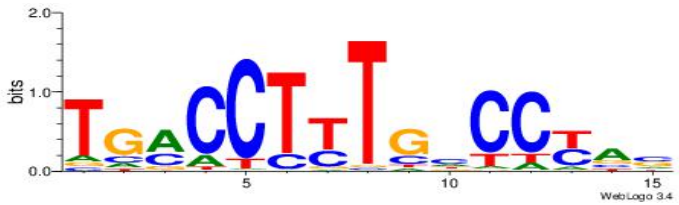
Dataset #: 3
Motif ID: 36
Motif name: PPARGRXRA
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 1
Number of overlap: 15
Similarity score: 2.55391

Alignment:
-----TGRCCTKTGHCCKAB
DGVBCABTGDWGCGKRRCSR

Original motif Consensus sequence: BTRGGDCARAGGKCA

Reverse complement motif Consensus sequence: TGRCCTKTGHCCK





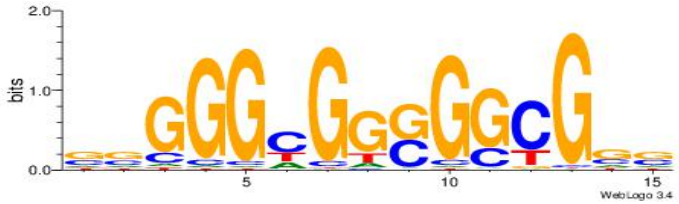
Dataset #:	4
Motif ID:	91
Motif name:	ssCGCCsCCrCCCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	15
Similarity score:	2.55604

Alignment:

```
SSGGGCGGSGGCGSS-----
MSGKKRCGCWDCABTGBBCD
```

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS



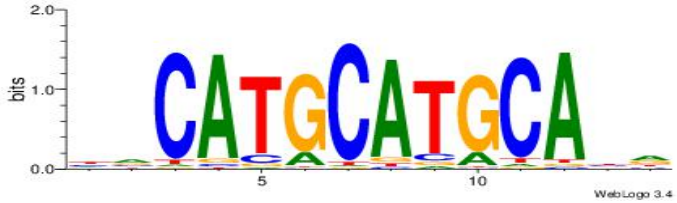
Dataset #: 4

Motif ID:	101
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	3.05422

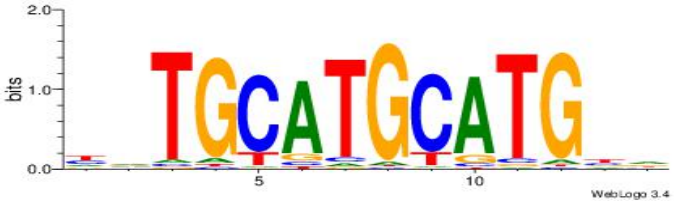
Alignment:

```
------HVCATGCATGCABD
MSGKKRCGCWDCABTGBBCD
```

Original motif Consensus sequence: HVCATGCATGCABD



Reverse complement motif Consensus sequence: DVTGCATGCATGB



Dataset #: 3 Motif ID: 62 Motif name: RORA_1

Original motif Consensus sequence: AWVDAGGTCA

Reverse complement motif Consensus sequence: TGACCTDVWT

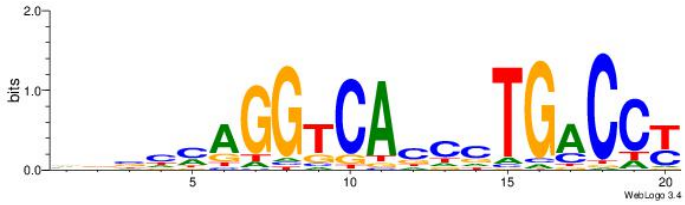
Best Matches for Motif ID 62 (Highest to Lowest)

Dataset #:	3
Motif ID:	45
Motif name:	ESR1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0417851

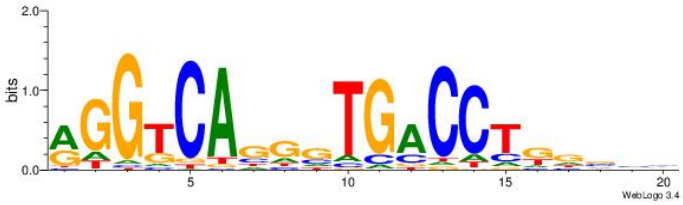
Alignment:

```
MGGTCAGGGTGACCTRDBHV
---------TGACCTDVWT-
```

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY



Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV



Dataset #:	3
Motif ID:	33
Motif name:	RXRAVDR
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif

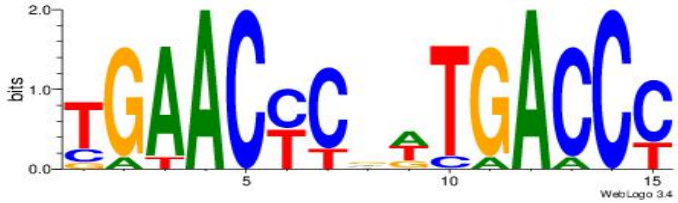
Direction:	Forward
Position number:	6
Number of overlap:	10
Similarity score:	0.05325

Alignment:

```
GGGTCAWBGRGTTCA
-----AWVDAGGTCA
```

Original motif Consensus sequence: GGGTCAWBGRGTTCA

Reverse complement motif Consensus sequence: TGAACKCBWTGAC

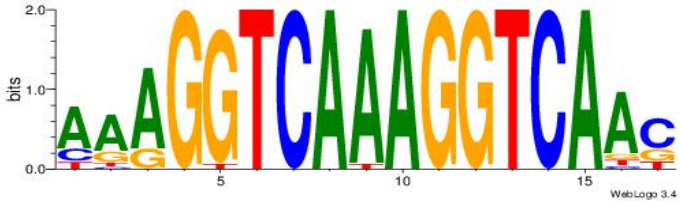


Dataset #:	3
Motif ID:	59
Motif name:	NR1H2RXRA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	10
Similarity score:	0.05425

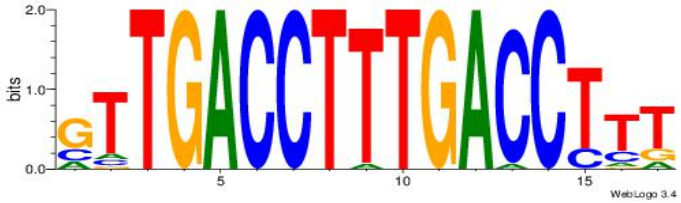
Alignment:

```
AAAGGTCAAAGGTCAAC
-----AWVDAGGTCA--
```

Original motif Consensus sequence: AAAGGTCAAAGGTCAAC



Reverse complement motif Consensus sequence: GTTGACCTTTGACCTTT

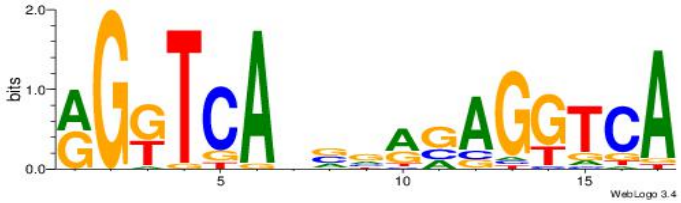


Dataset #:	3
Motif ID:	63
Motif name:	RXRRAR_DR5
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0600761

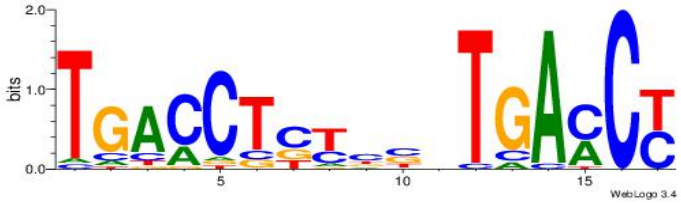
Alignment:

```
TGACCTCKVVBTGAYCK
TGACCTDVWT-------
```

Original motif Consensus sequence: RGKTCABVVRGAGGTCA



Reverse complement motif Consensus sequence: TGACCTCKVVBTGAYCK

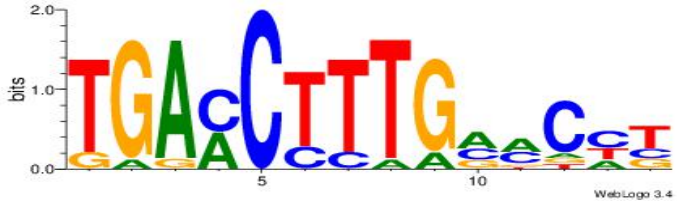


Dataset #:	3
Motif ID:	38
Motif name:	NR2F1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	10
Similarity score:	0.0654808

Alignment:

```
TGAMCTTTGMMCYT
----TGACCTDVWT
```

Original motif Consensus sequence: TGAMCTTTGMMCYT



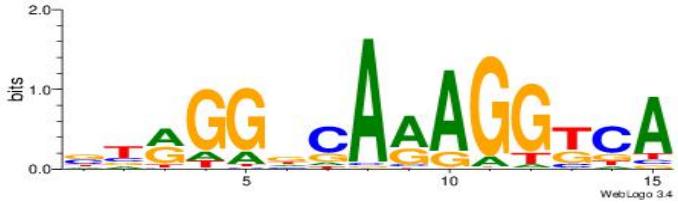
Reverse complement motif Consensus sequence: AKGYYCAAAGRTCA

Dataset #:	3
Motif ID:	36
Motif name:	PPARGRXRA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10

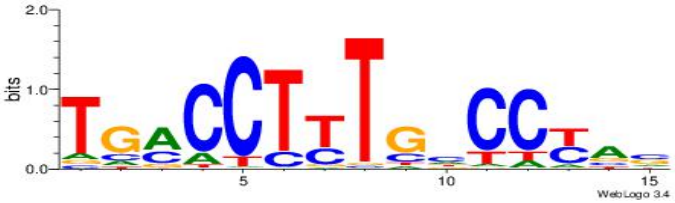
Similarity score: 0.06668

Alignment:
BTRGGDCARAGGKCA
-----AWVDAGGTCA

Original motif Consensus sequence: BTRGGDCARAGGKCA



Reverse complement motif Consensus sequence: TGRCCTKTGHCCK

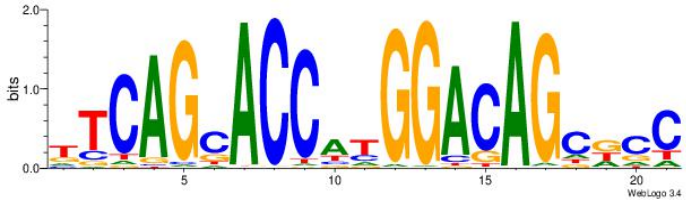


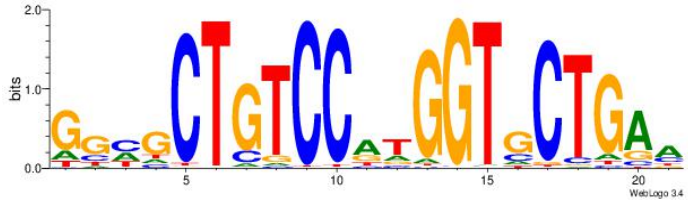
Dataset #: 3
Motif ID: 35
Motif name: REST
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 7
Number of overlap: 10
Similarity score: 0.0755608

Alignment:
TTCAGCACCATGGACAGCKCC
------AWVDAGGTCA-----

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC

Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA



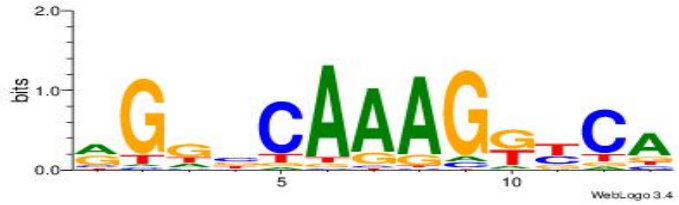


Dataset #:	3
Motif ID:	50
Motif name:	HNF4A
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	10
Similarity score:	0.0803396

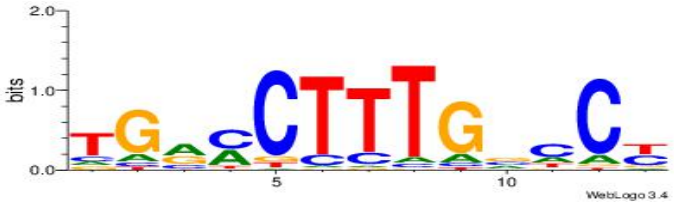
Alignment:

```
RGGBCAAAGKYCA
---AWVDAGGTCA
```

Original motif Consensus sequence: RGGBCAAAGKYCA



Reverse complement motif Consensus sequence: TGMYCTTTGBCCK



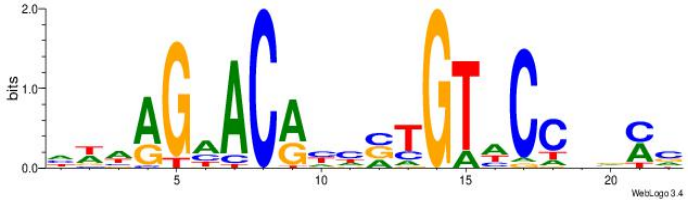
Dataset #:	3
Motif ID:	40

Motif name:	Ar
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	13
Number of overlap:	10
Similarity score:	0.0814167

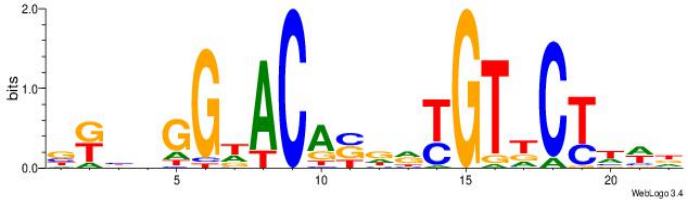
Alignment:

```
VRVDGGHACAVDDKGTHCTDWH
------------AWVDAGGTCA
```

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



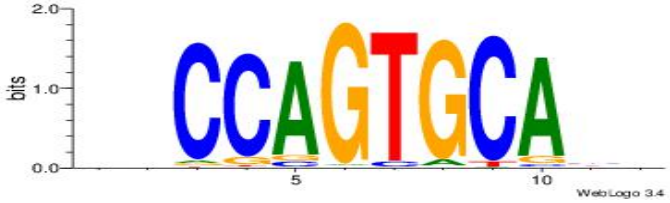
Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH



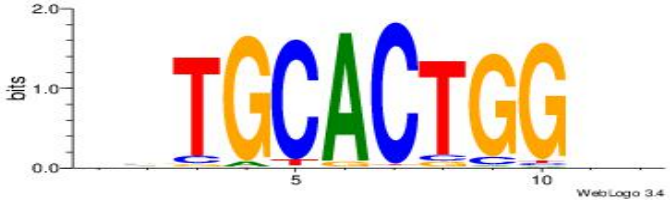
Dataset #:	4
Motif ID:	103
Motif name:	ccCCAGTGCAbr
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0826434

Alignment:
DBTGCACTGGVD
--TGACCTDVWT

Original motif Consensus sequence: HVCCAGTGCABD

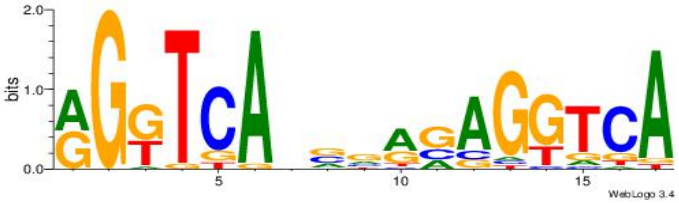


Reverse complement motif Consensus sequence: DBTGCACTGGVD

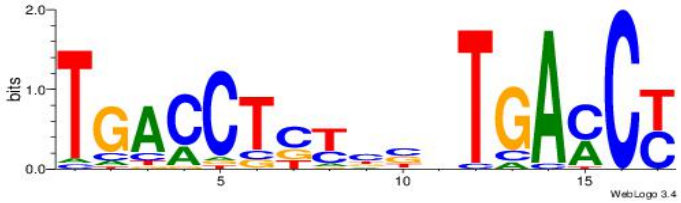


Dataset #: 3 Motif ID: 63 Motif name: RXRRAR_DR5

Original motif Consensus sequence: RGKTCABVVRGAGGTCA



Reverse complement motif Consensus sequence: TGACCTCKVVBTGAYCK



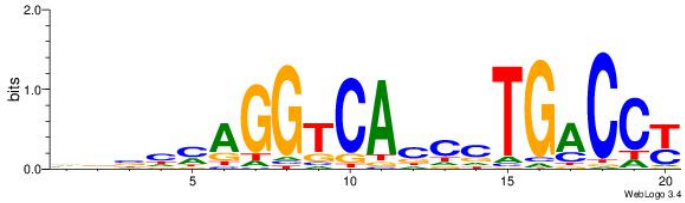
Best Matches for Motif ID 63 (Highest to Lowest)

Dataset #:	3
Motif ID:	45
Motif name:	ESR1
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward

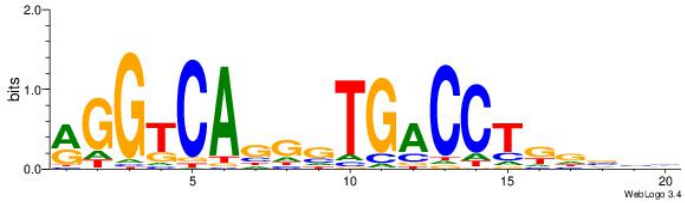
Position number: 1
Number of overlap: 17
Similarity score: 0.0554256

Alignment:
MGGTCAGGGTGACCTRDBHV
---RGKTCABVVRGAGGTCA

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY



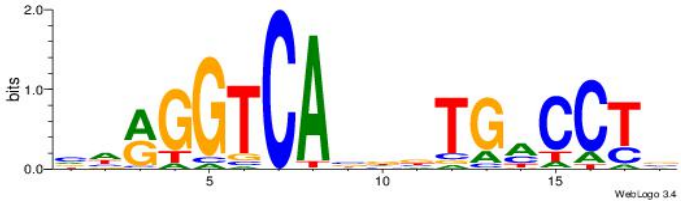
Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV



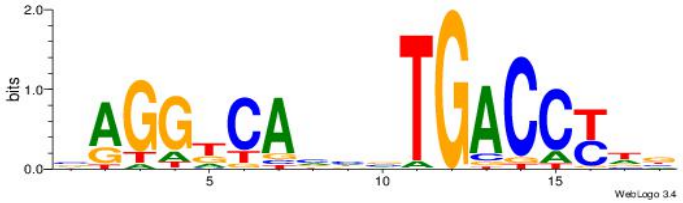
Dataset #: 3
Motif ID: 46
Motif name: ESR2
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 2
Number of overlap: 17
Similarity score: 0.0590677

Alignment:
VHRGGTCABDBTGMCCTB
-TGACCTCKVVBTGAYCK

Original motif Consensus sequence: VHRGGTCABDBTGMCCTB



Reverse complement motif Consensus sequence: BAGGYCABHBTGACCKHV

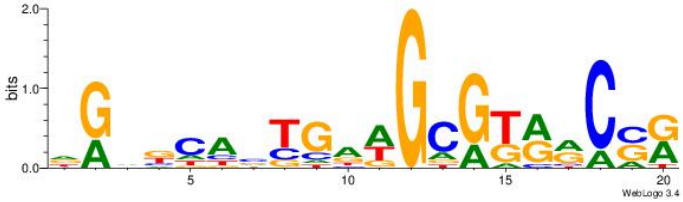


Dataset #:	3
Motif ID:	61
Motif name:	Pax5
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	17
Similarity score:	0.0594693

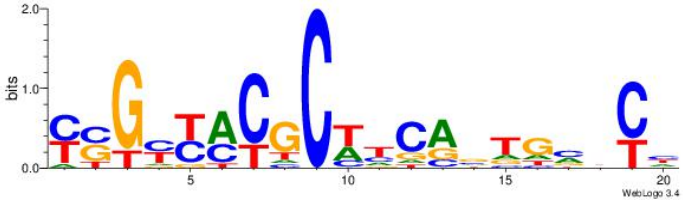
Alignment:

```
MSGKKRCGCWDCABTGBBCD
---TGACCTCKVVBTGAYCK
```

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR



Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD

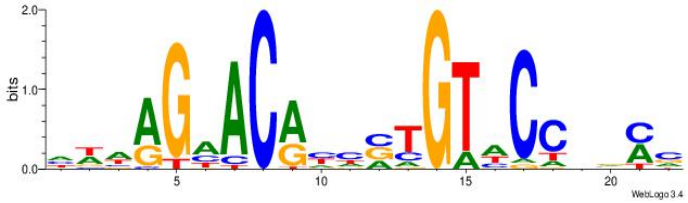


Dataset #:	3
Motif ID:	40
Motif name:	Ar
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	17
Similarity score:	0.0751876

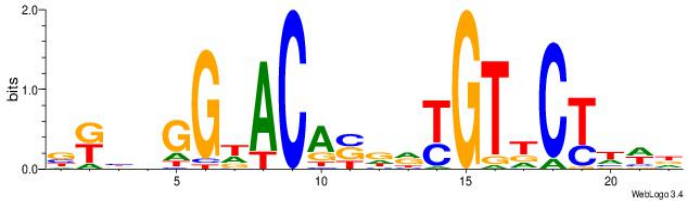
Alignment:

```
HWDAGHACRHHVTGTHCCHVMV
----TGACCTCKVVBTGAYCK-
```

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH



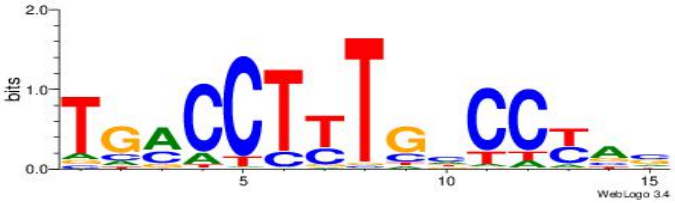
Dataset #:	3
Motif ID:	36
Motif name:	PPARGRXRA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1

Number of overlap: 15
Similarity score: 1.0449

Alignment:
--BTRGGDCARAGGKCA
RGKTCABVVRGAGGTCA

Original motif Consensus sequence: BTRGGDCARAGGKCA

Reverse complement motif Consensus sequence: TGRCCTKTGHCCK

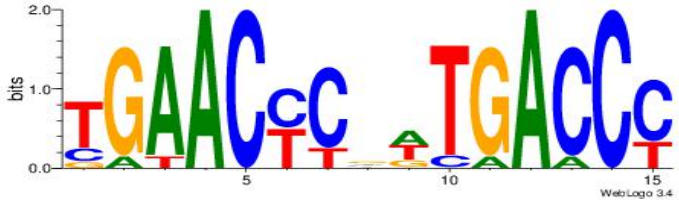


Dataset #: 3
Motif ID: 33
Motif name: RXRAVDR
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 15
Similarity score: 1.05297

Alignment:
GGGTCAWBGRGTTCA--
RGKTCABVVRGAGGTCA

Original motif Consensus sequence: GGGTCAWBGRGTTCA

Reverse complement motif Consensus sequence: TGAACKCBWTGAC



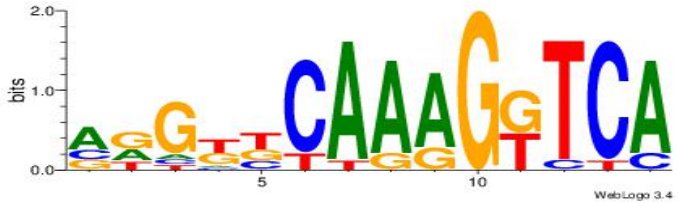
Dataset #:	3
Motif ID:	38
Motif name:	NR2F1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	1.56607

Alignment:

```
---TGAMCTTTGMMCYT
TGACCTCKVVBTGAYCK
```

Original motif Consensus sequence: TGAMCTTTGMMCYT

Reverse complement motif Consensus sequence: AKGYYCAAAGRTCA



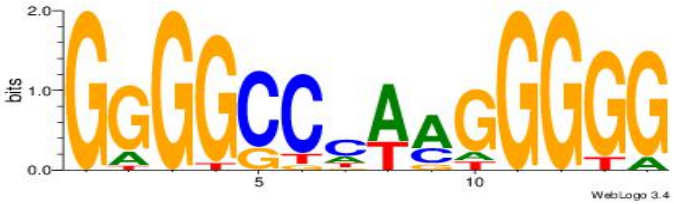
Dataset #:	3
Motif ID:	37

Motif name:	PLAG1
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:	1.57917

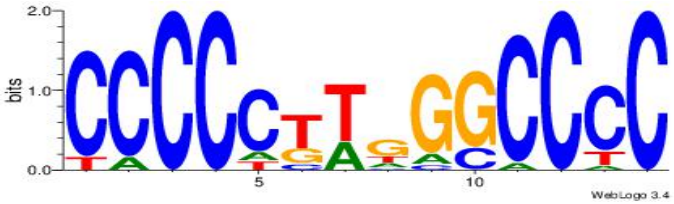
Alignment:

```
GGGGCCCAAGGGGG---
RGKTCABVVRGAGGTCA
```

Original motif Consensus sequence: GGGGCCCAAGGGGG



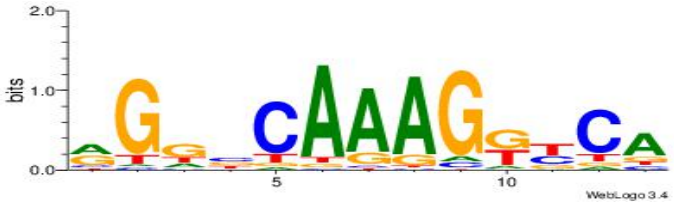
Reverse complement motif Consensus sequence: CCCCCTTGGGCCC



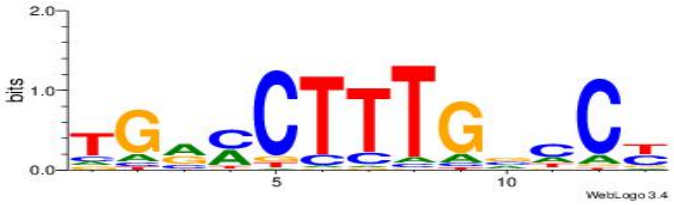
Dataset #:	3
Motif ID:	50
Motif name:	HNF4A
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	13
Similarity score:	2.0437

Alignment:
TGMYCTTTGBCCK----
TGACCTCKVVBTGAYCK

Original motif Consensus sequence: RGGBCAAAGKYCA



Reverse complement motif Consensus sequence: TGMYCTTTGBCCK

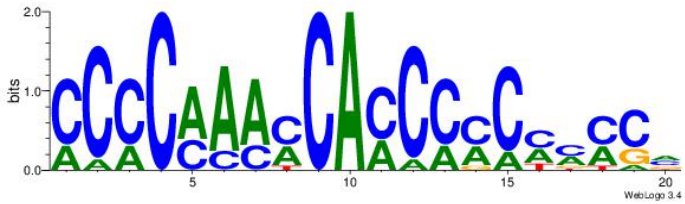


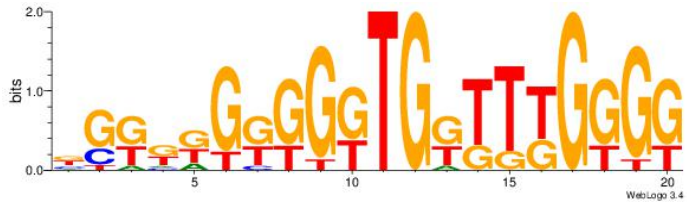
Dataset #:	3
Motif ID:	34
Motif name:	RREB1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	8
Number of overlap:	13
Similarity score:	2.06494

Alignment:
----CCCCMAAMCAMCCMCMMMCV
TGACCTCKVVBTGAYCK-------

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV

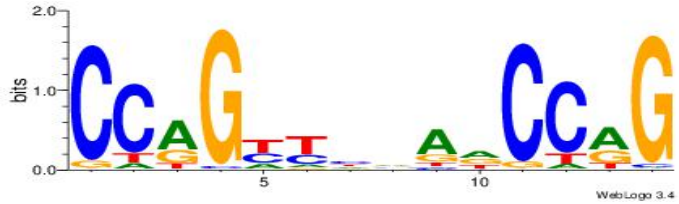
Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG



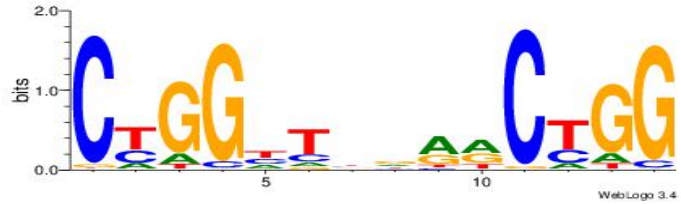


Dataset #: 3 Motif ID: 64 Motif name: Tcfcp2l1

Original motif Consensus sequence: CCAGYYHVADCCRG



Reverse complement motif Consensus sequence: CKGGDTBDMMCT



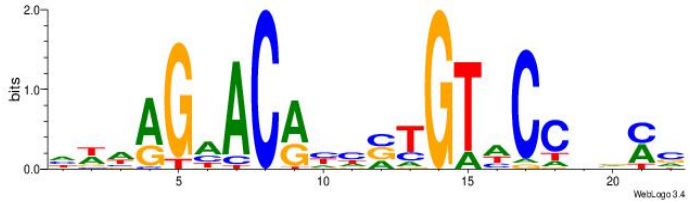
Best Matches for Motif ID 64 (Highest to Lowest)

Dataset #:	3
Motif ID:	40
Motif name:	Ar
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	14
Similarity score:	0.0679942

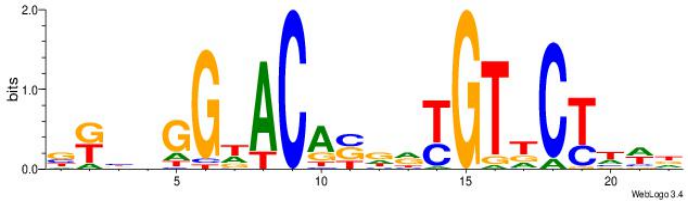
Alignment:

```
HWDAGHACRHHVTGTHCCHVMV
------CCAGYYHVADCCRG--
```

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH

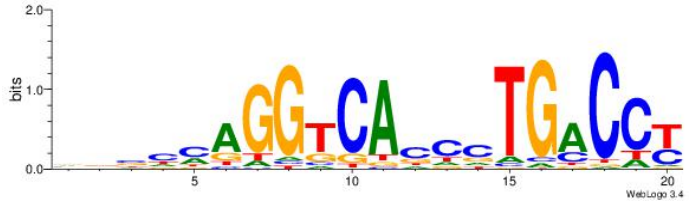


Dataset #:	3
Motif ID:	45
Motif name:	ESR1
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	14
Similarity score:	0.0713928

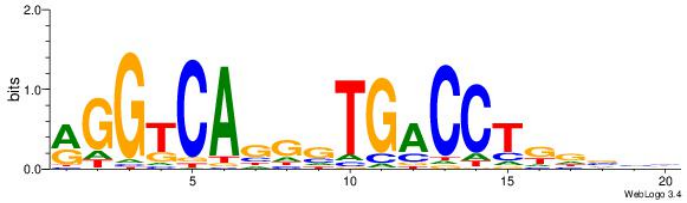
Alignment:

```
MGGTCAGGGTGACCTRDBHV
---CCAGYYHVADCCRG---
```

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY



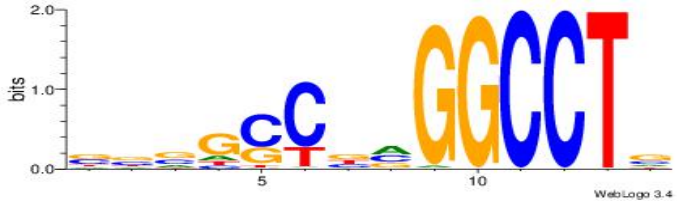
Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV



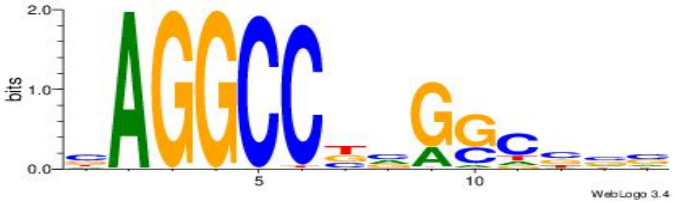
Dataset #:	3
Motif ID:	28
Motif name:	Zfx
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0714852

Alignment:
BBVGCCBVGGCCTV
CCAGYYHVADCCRG

Original motif Consensus sequence: BBVGCCBVGGCCTV



Reverse complement motif Consensus sequence: VAGGCCBBGGCVB

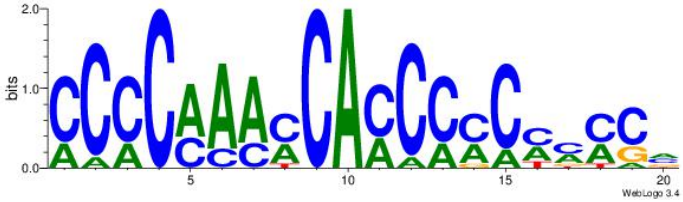


Dataset #:	3
Motif ID:	34
Motif name:	RREB1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	14

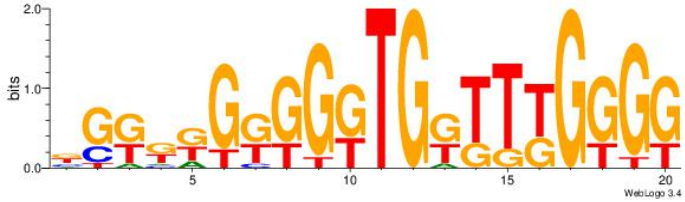
Similarity score: 0.0777364

Alignment:
BGRRRGRGGRTGRTTYGGGG
-----CKGGDTBDMMCTGG-

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG

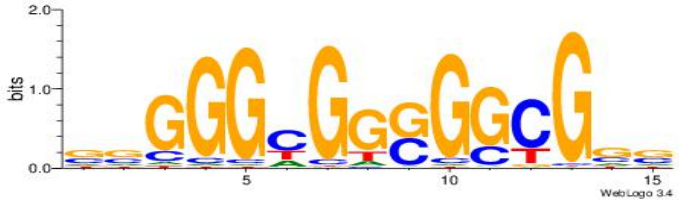


Dataset #: 4
Motif ID: 91
Motif name: ssCGCCsCCrCCCss
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 2
Number of overlap: 14
Similarity score: 0.0779784

Alignment:
SSCGCCSCCGCCCSS
-CCAGYYHVADCCRG

Original motif Consensus sequence: SSCGCCSCCGCCCSS

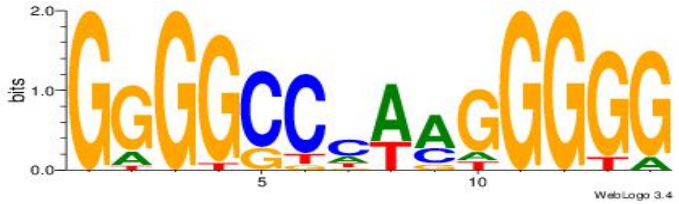
Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS



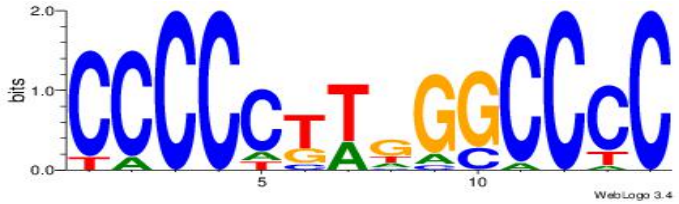
Dataset #:	3
Motif ID:	37
Motif name:	PLAG1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0817193

Alignment:
GGGGCCCAAGGGGG
CKGGDTBDMMCTGG

Original motif Consensus sequence: GGGGCCCAAGGGGG



Reverse complement motif Consensus sequence: CCCCCTTGGGCCC



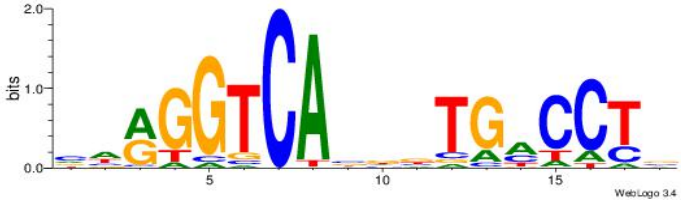
Dataset #:	3
Motif ID:	46

Motif name:	ESR2
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0828703

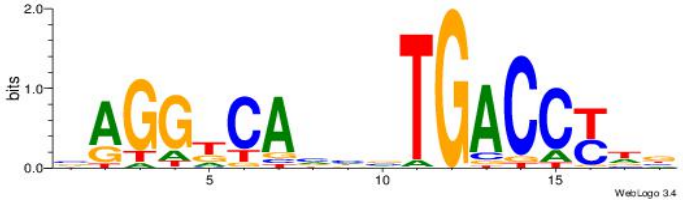
Alignment:

```
VHRGGTCABDBTGMCCTB
----CKGGDTBDMMCTGG
```

Original motif Consensus sequence: VHRGGTCABDBTGMCCTB



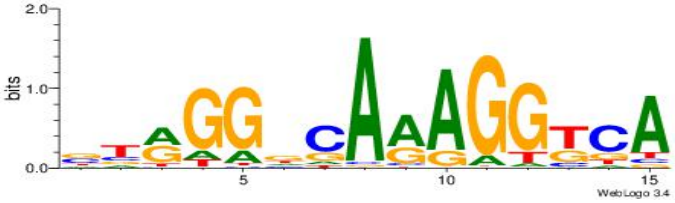
Reverse complement motif Consensus sequence: BAGGYCABHBTGACCKHV



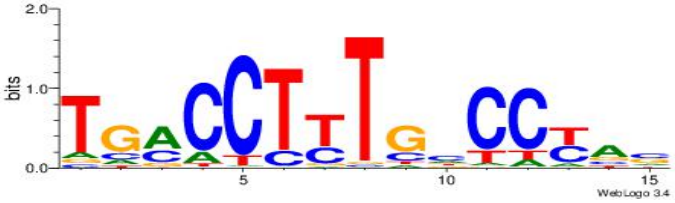
Dataset #:	3
Motif ID:	36
Motif name:	PPARGRXRA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0829929

Alignment:
TGRCCTKTGHCCKAB
-CKGGDTBDMMCTGG

Original motif Consensus sequence: BTRGGDCARAGGKCA



Reverse complement motif Consensus sequence: TGRCCTKTGHCCK

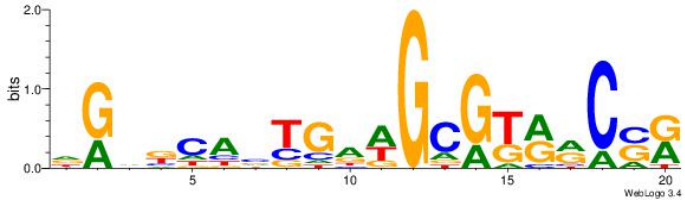


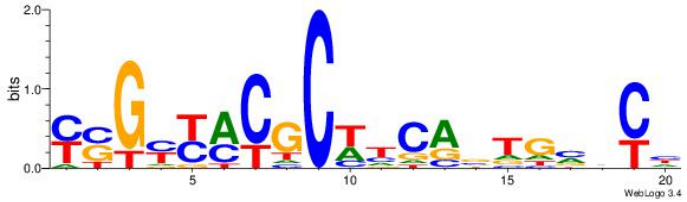
Dataset #:	3
Motif ID:	61
Motif name:	Pax5
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8
Number of overlap:	13
Similarity score:	0.575635

Alignment:
DGVBCABTGDWGCGKRRCSR-
-------CKGGDTBDMMCTGG

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR

Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD



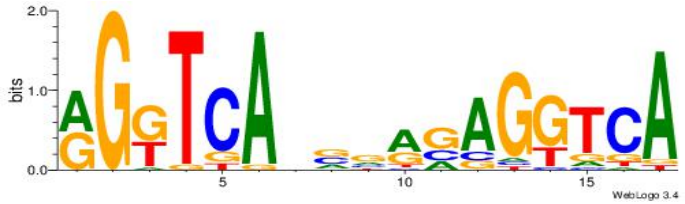


Dataset #:	3
Motif ID:	63
Motif name:	RXRRAR_DR5
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	13
Similarity score:	0.578477

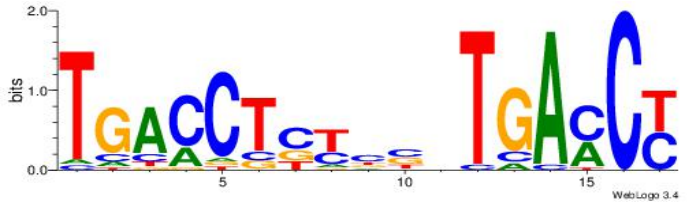
Alignment:

```
RGKTCABVVRGAGGTCA-
----CKGGDTBDMMCTGG
```

Original motif Consensus sequence: RGKTCABVVRGAGGTCA



Reverse complement motif Consensus sequence: TGACCTCKVVBTGAYCK



Dataset #: 4 Motif ID: 65 Motif name: ssCGrGCGss

Original motif Consensus sequence: VSCGRGCGBV

Reverse complement motif Consensus sequence: VBCGCMCGSV

Best Matches for Motif ID 65 (Highest to Lowest)

Dataset #:	4
Motif ID:	66
Motif name:	ssCGssCGss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0

Alignment:

```
VSCGSSCGSB
VBCGCMCGSV
```

Original motif Consensus sequence: BSCGSSCGSV

Reverse complement motif Consensus sequence: VSCGSSCGSB

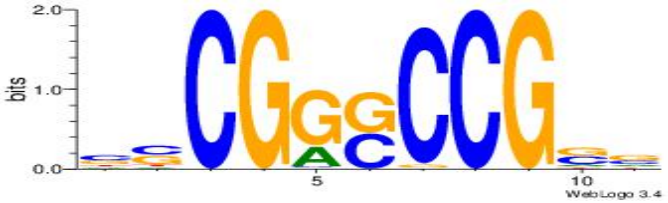
Dataset #:	4
Motif ID:	87
Motif name:	ssCGGsYCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0380615

Alignment:

```
VSCGGSCCGSB
VSCGRGCGBV-
```

Original motif Consensus sequence: BSCGGSCCGSV

Reverse complement motif Consensus sequence: VSCGGSCCGSB

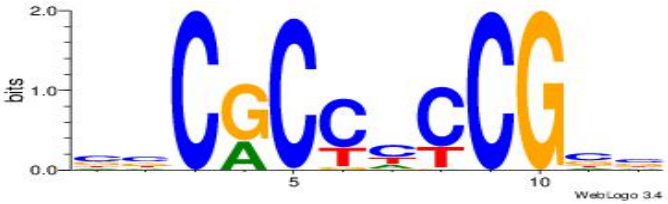


Dataset #:	4
Motif ID:	88
Motif name:	ssCrCYyYCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	10

Similarity score: 0.0459192

Alignment:
BBCGGKGGMGBB
VSCGRGCGBV--

Original motif Consensus sequence: BBCRCCYCCGBB



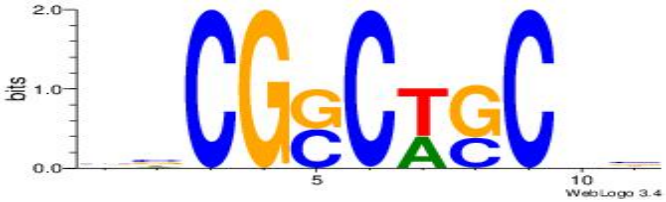
Reverse complement motif Consensus sequence: BBCGGKGGMGBB

Dataset #: 4
Motif ID: 90
Motif name: ssCGsCwsCss
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: 0.0482532

Alignment:
BBCGSCWSCBB
VBCGCMCGSV-

Original motif Consensus sequence: BBCGSCWSCBB

Reverse complement motif Consensus sequence: BBGSWGSCGBB

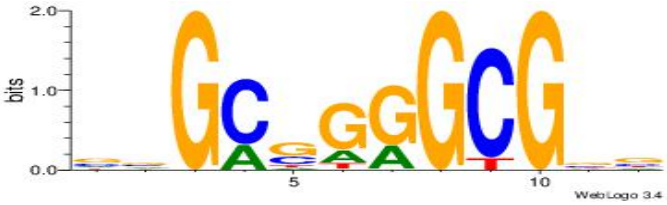


Dataset #:	4
Motif ID:	67
Motif name:	ssGMsGRGCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0487331

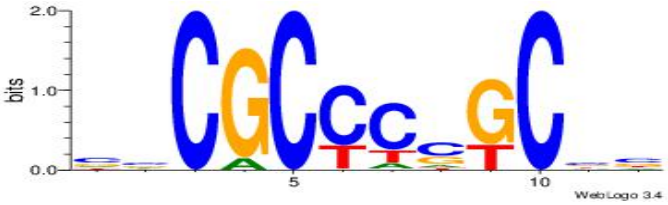
Alignment:

```
VVGCSGGGCGBB
--VSCGRGCGBV
```

Original motif Consensus sequence: VVGCSGGGCGBB



Reverse complement motif Consensus sequence: BBCGCCCSGCVV



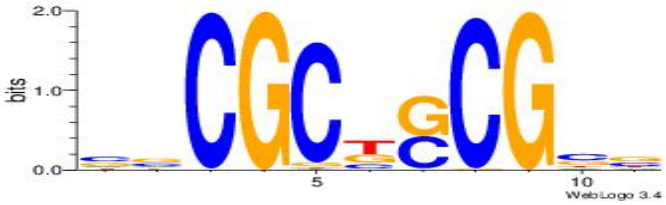
Dataset #:	4
Motif ID:	94

Motif name:	ssCGCksCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0500566

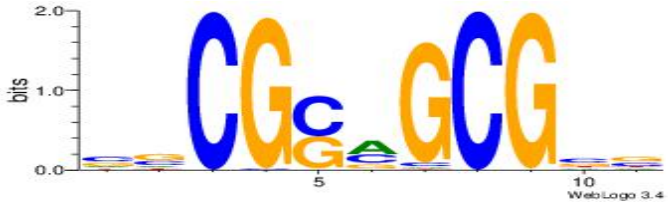
Alignment:

```
BBCGSRGCGVV
-VSCGRGCGBV
```

Original motif Consensus sequence: VVCGCKSCGBB



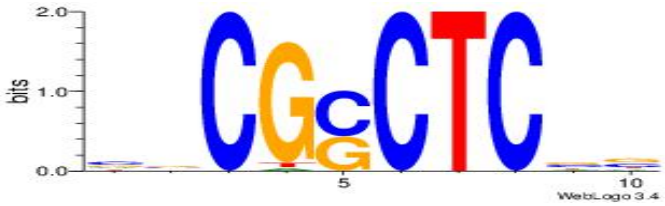
Reverse complement motif Consensus sequence: BBCGSRGCGVV



Dataset #:	4
Motif ID:	73
Motif name:	ssCGsCTCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0533306

Alignment:
BBGAGSCGVV
VSCGRGCGBV

Original motif Consensus sequence: VVCGSCTCBB



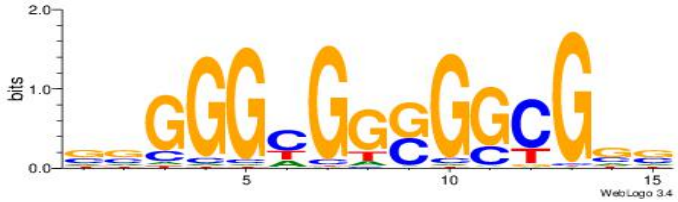
Reverse complement motif Consensus sequence: BBGAGSCGVV

Dataset #:	4
Motif ID:	91
Motif name:	ssCGCCsCCrCCCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	10
Similarity score:	0.0556174

Alignment:
SSCGCCSCCGCCCSS
VBCGCMCGSV-----

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS

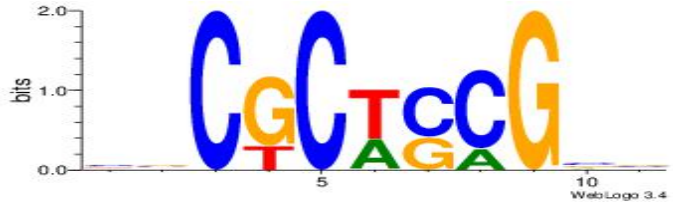


Dataset #:	4
Motif ID:	72
Motif name:	ssCKCwsCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0590467

Alignment:

```
VBCGSWGCGVB
-VSCGRGCGBV
```

Original motif Consensus sequence: BVCGCWSCGBV



Reverse complement motif Consensus sequence: VBCGSWGCGVB

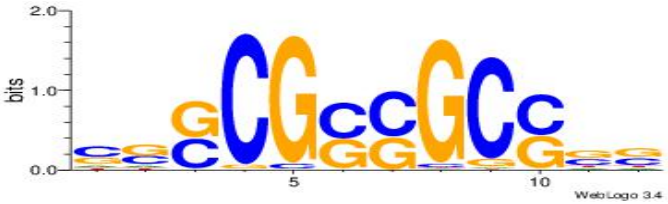
Dataset #:	4
Motif ID:	78

Motif name:	sssCGssGCsss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0607038

Alignment:

```
SSSGCSSCGSSS
-VSCGRGCGBV-
```

Original motif Consensus sequence: SSSCGSSGCSSS



Reverse complement motif Consensus sequence: SSSGCSSCGSSS

Dataset #: 4 Motif ID: 66 Motif name: ssCGssCGss

Original motif Consensus sequence: BSCGSSCGSV

Reverse complement motif Consensus sequence: VSCGSSCGSB

Best Matches for Motif ID 66 (Highest to Lowest)

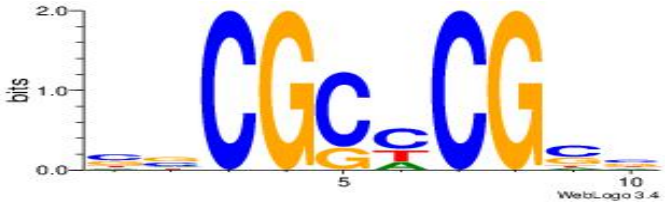
Dataset #:	4
Motif ID:	65
Motif name:	ssCGrGCGss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0

Alignment:

```
VBCGCMCGSV
VSCGSSCGSB
```

Original motif Consensus sequence: VSCGRGCGBV

Reverse complement motif Consensus sequence: VBCGCMCGSV



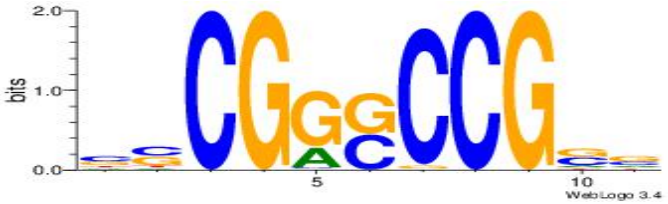
Dataset #:	4
Motif ID:	87
Motif name:	ssCGGsYCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	10

Similarity score: 0.0371913

Alignment:
VSCGGSCCGSB
BSCGSSCGSV-

Original motif Consensus sequence: BSCGGSCCGSV

Reverse complement motif Consensus sequence: VSCGGSCCGSB

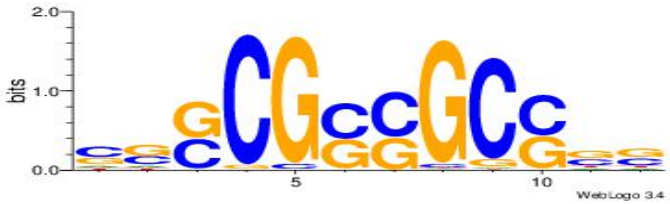


Dataset #: 4
Motif ID: 78
Motif name: sssCGssGCsss
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 2
Number of overlap: 10
Similarity score: 0.0470049

Alignment:
SSSGCSSCGSSS
-VSCGSSCGSB-

Original motif Consensus sequence: SSSCGSSGCSSS

Reverse complement motif Consensus sequence: SSSGCSSCGSSS

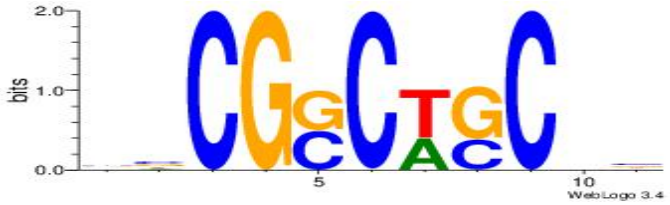


Dataset #:	4
Motif ID:	90
Motif name:	ssCGsCwsCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	10
Similarity score:	0.049129

Alignment:

```
BBGSWGSCGBB
-BSCGSSCGSV
```

Original motif Consensus sequence: BBCGSCWSCBB



Reverse complement motif Consensus sequence: BBGSWGSCGBB

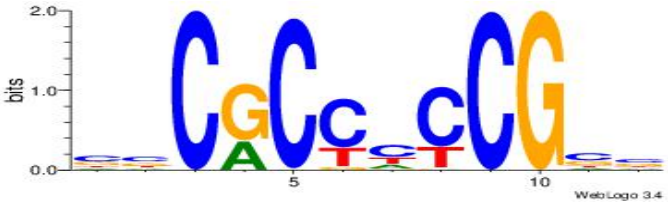
Dataset #:	4
Motif ID:	88

Motif name:	ssCrCYyYCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0497103

Alignment:

```
BBCGGKGGMGBB
BSCGSSCGSV--
```

Original motif Consensus sequence: BBCRCCYCCGBB

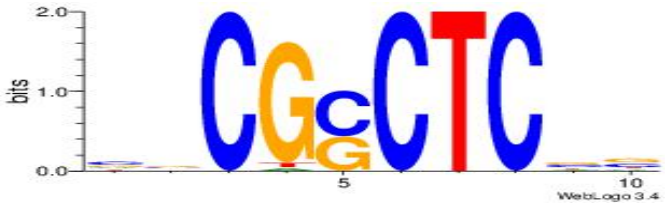


Reverse complement motif Consensus sequence: BBCGGKGGMGBB

Dataset #:	4
Motif ID:	73
Motif name:	ssCGsCTCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0521822

Alignment:
VVCGSCTCBB
BSCGSSCGSV

Original motif Consensus sequence: VVCGSCTCBB



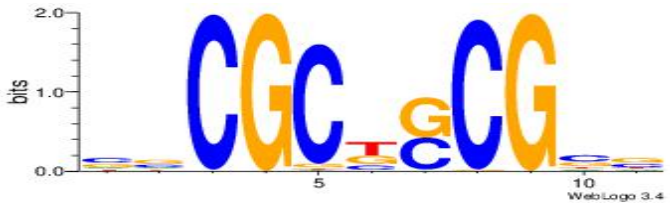
Reverse complement motif Consensus sequence: BBGAGSCGVV

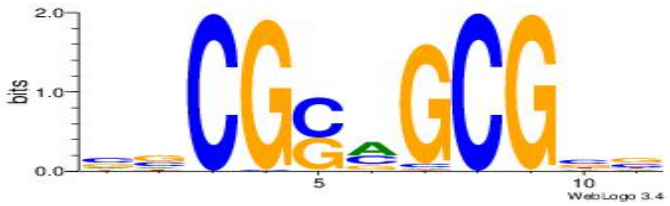
Dataset #:	4
Motif ID:	94
Motif name:	ssCGCksCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0583987

Alignment:
VVCGCKSCGBB
-BSCGSSCGSV

Original motif Consensus sequence: VVCGCKSCGBB

Reverse complement motif Consensus sequence: BBCGSRGCGVV





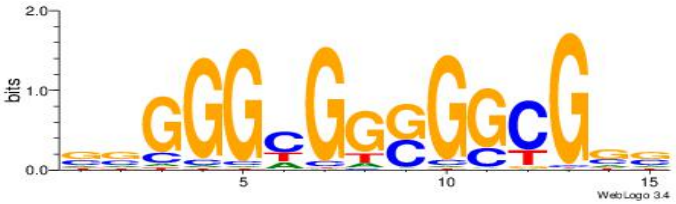
Dataset #:	4
Motif ID:	91
Motif name:	ssCGCCsCCrCCCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	10
Similarity score:	0.0642479

Alignment:

```
SSCGCCSCCGCCCSS
VSCGSSCGSB-----
```

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS



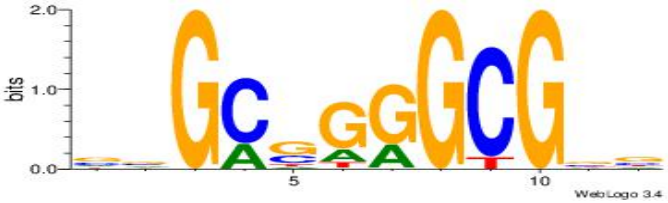
Dataset #: 4

Motif ID:	67
Motif name:	ssGMsGRGCGss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0646516

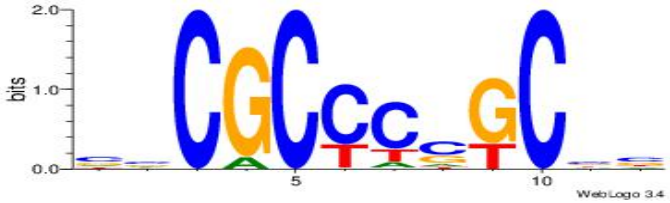
Alignment:

```
VVGCSGGGCGBB
--VSCGSSCGSB
```

Original motif Consensus sequence: VVGCSGGGCGBB



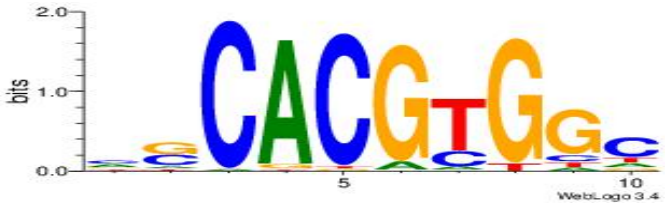
Reverse complement motif Consensus sequence: BBCGCCCSGCVV



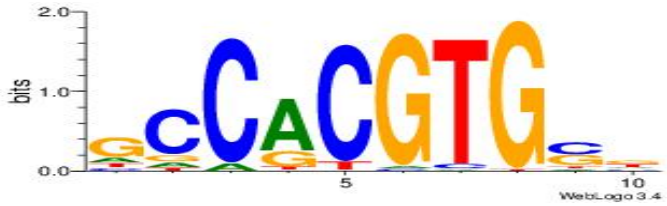
Dataset #:	3
Motif ID:	56
Motif name:	Mycn
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0718705

Alignment:
HSCACGTGGC
BSCGSSCGSV

Original motif Consensus sequence: HSCACGTGGC

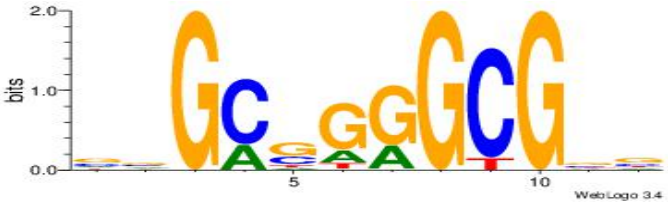


Reverse complement motif Consensus sequence: GCCACGTGSD

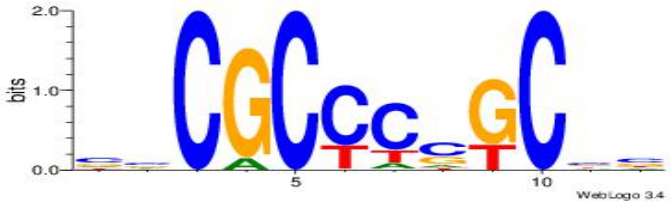


Dataset #: 4 Motif ID: 67 Motif name: ssGMsGRGCGss

Original motif Consensus sequence: VVGCSGGGCGBB



Reverse complement motif Consensus sequence: BBCGCCCSGCVV



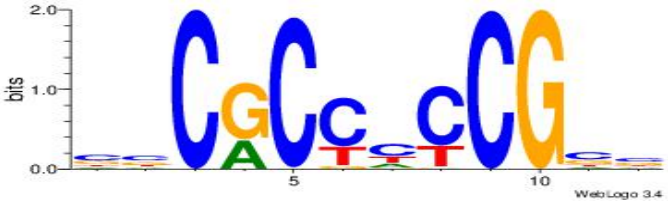
Best Matches for Motif ID 67 (Highest to Lowest)

Dataset #:	4
Motif ID:	88
Motif name:	ssCrCYyYCGss
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: 0.0191911

Alignment:
BBCGGKGGMGBB
VVGCSGGGCGBB

Original motif Consensus sequence: BBCRCCYCCGBB



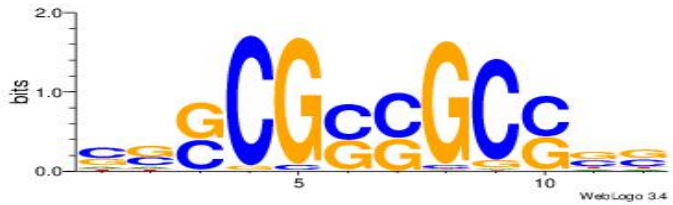
Reverse complement motif Consensus sequence: BBCGGKGGMGBB

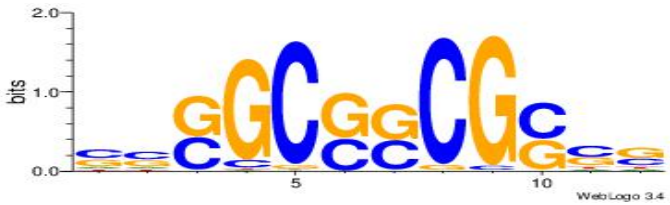
Dataset #: 4
Motif ID: 78
Motif name: sssCGssGCsss
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 1
Number of overlap: 12
Similarity score: 0.0208422

Alignment:
SSSGCSSCGSSS
BBCGCCCSGCVV

Original motif Consensus sequence: SSSCGSSGCSSS

Reverse complement motif Consensus sequence: SSSGCSSCGSSS



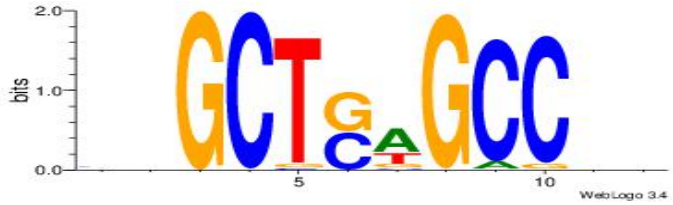


Dataset #:	4
Motif ID:	77
Motif name:	ssGCTswGCCms
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.0271966

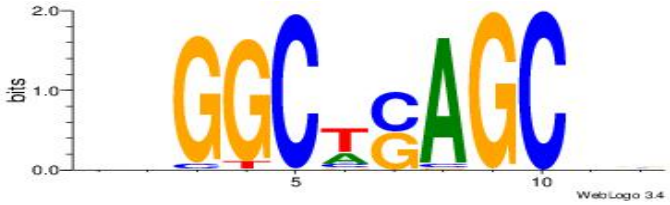
Alignment:

```
VBGCTSAGCCHB
VVGCSGGGCGBB
```

Original motif Consensus sequence: VBGCTSAGCCHB



Reverse complement motif Consensus sequence: BDGGCTSAGCBV



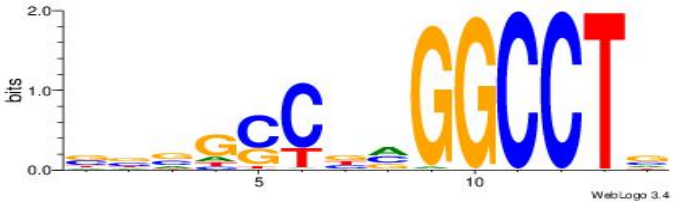
Dataset #:	3
Motif ID:	28

Motif name:	Zfx
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	12
Similarity score:	0.0349435

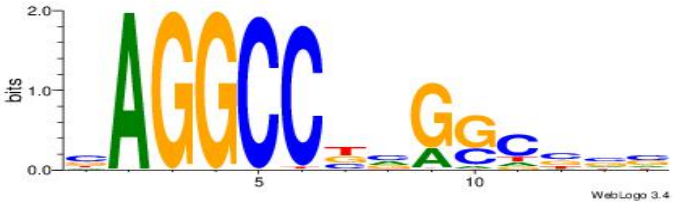
Alignment:

```
BBVGCCBVGGCCTV
--VVGCSGGGCGBB
```

Original motif Consensus sequence: BBVGCCBVGGCCTV



Reverse complement motif Consensus sequence: VAGGCCBBGGCVB

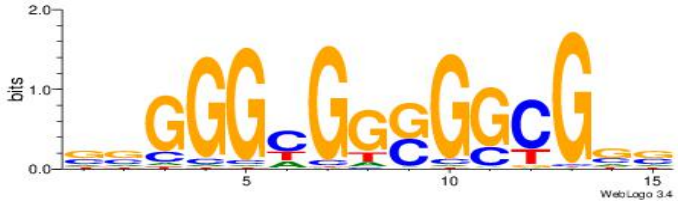


Dataset #:	4
Motif ID:	91
Motif name:	ssCGCCsCCrCCCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	12
Similarity score:	0.0401057

Alignment:
SSCGCCSCCGCCCSS
-BBCGCCCSGCVV--

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS

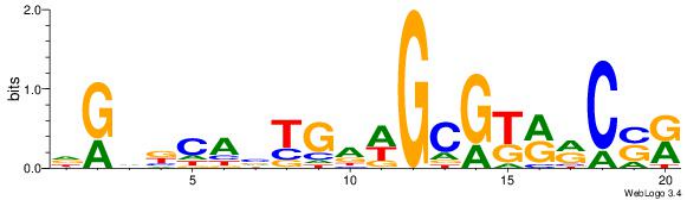


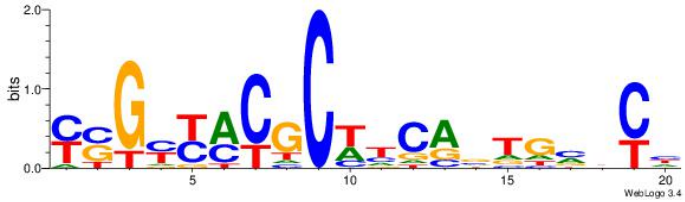
Dataset #:	3
Motif ID:	61
Motif name:	Pax5
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	12
Similarity score:	0.0452303

Alignment:
DGVBCABTGDWGCGKRRCSR
----VVGCSGGGCGBB----

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR

Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD



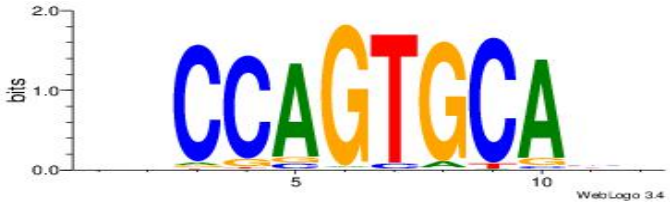


Dataset #:	4
Motif ID:	103
Motif name:	ccCCAGTGCAbr
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.046174

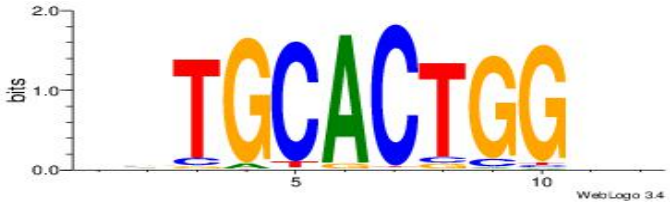
Alignment:

```
DBTGCACTGGVD
BBCGCCCSGCVV
```

Original motif Consensus sequence: HVCCAGTGCABD



Reverse complement motif Consensus sequence: DBTGCACTGGVD



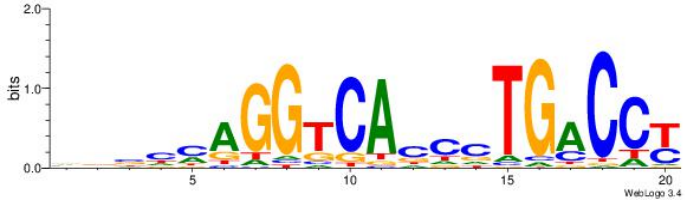
Dataset #:	3
Motif ID:	45

Motif name:	ESR1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	12
Similarity score:	0.0464618

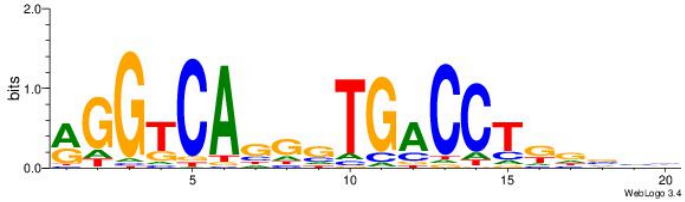
Alignment:

```
VDBHMAGGTCACCCTGACCY
-VVGCSGGGCGBB-------
```

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY



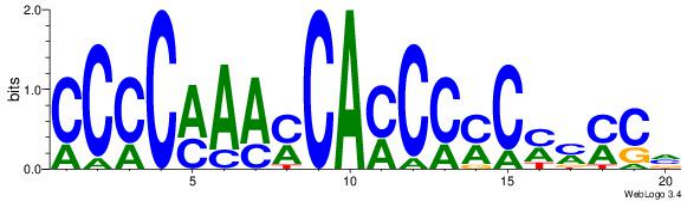
Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV



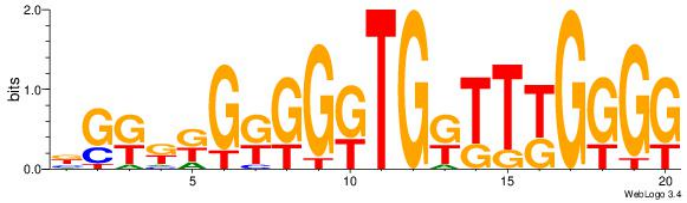
Dataset #:	3
Motif ID:	34
Motif name:	RREB1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	12
Similarity score:	0.046753

Alignment:
CCCCMAAMCAMCCMCMMMCV
--BBCGCCCSGCVV------

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG

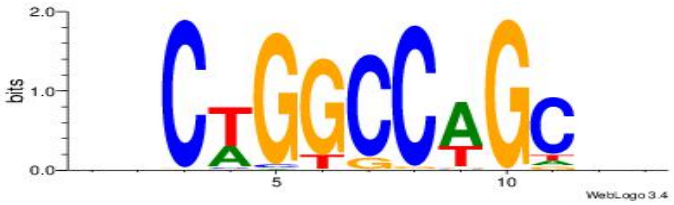


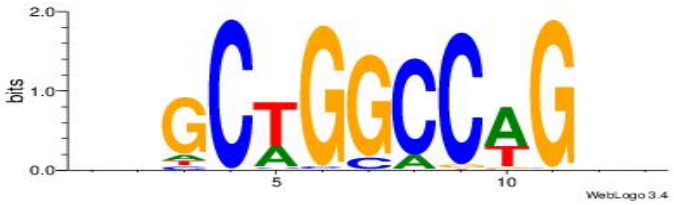
Dataset #:	4
Motif ID:	80
Motif name:	ssCwGGCCwGCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.0498034

Alignment:
BBCWGGCCAGCBB
-BBCGCCCSGCVV

Original motif Consensus sequence: BBCWGGCCAGCBB

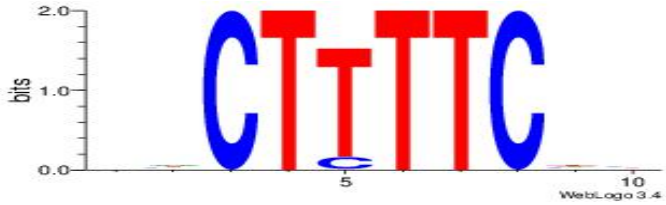
Reverse complement motif Consensus sequence: BBGCTGGCCWGB





Dataset #: 4 **Motif ID: 68** **Motif name: dwCTTTTCwy**

Original motif Consensus sequence: DHCTTTTCHH



Reverse complement motif Consensus sequence: DHGAAAAGHD

Best Matches for Motif ID 68 (Highest to Lowest)

Dataset #:	4
Motif ID:	71
Motif name:	wyATTTTAww
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.00508721

Alignment:

```
DDTAAAATHD
DHGAAAAGHD
```

Original motif Consensus sequence: DHATTTTADD

Reverse complement motif Consensus sequence: DDTAAAATHD

Dataset #:	4
Motif ID:	81
Motif name:	wwTAAwAAww
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0148156

Alignment:

```
DDTAAWAAHH
DHGAAAAGHD
```

Original motif Consensus sequence: DDTAAWAAHH

Reverse complement motif Consensus sequence: HHTTWTTADD

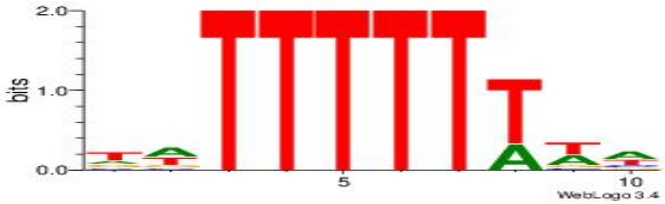
Dataset #:	4
Motif ID:	76
Motif name:	wwWAAAAAwa
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0152278

Alignment:

```
WWAAAAAAWH
DHGAAAAGHD
```

Original motif Consensus sequence: WWAAAAAAWH

Reverse complement motif Consensus sequence: HWTTTTTTWW



Dataset #:	4
Motif ID:	83
Motif name:	wwTAAAwAww
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10

Similarity score: 0.0196583

Alignment:
DDTAAAWAHH
DHGAAAAGHD

Original motif Consensus sequence: DDTAAAWAHH

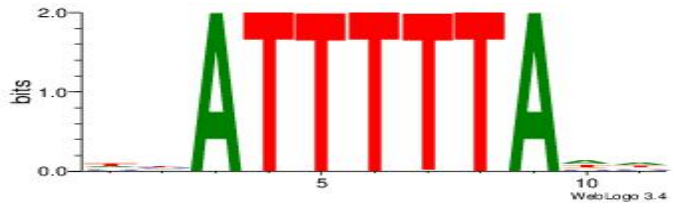
Reverse complement motif Consensus sequence: HHTWTTTADD

Dataset #: 4
Motif ID: 85
Motif name: wtATTTTTAww
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 2
Number of overlap: 10
Similarity score: 0.0226988

Alignment:
DDTAAAAATHD
DHGAAAAGHD-

Original motif Consensus sequence: DHATTTTTADD

Reverse complement motif Consensus sequence: DDTAAAAATHD

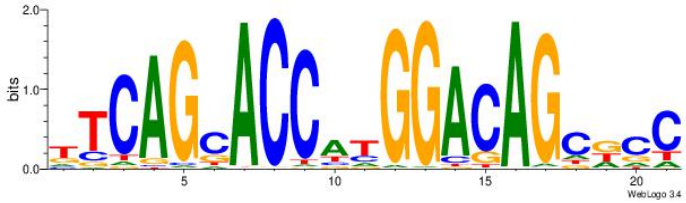


Dataset #:	3
Motif ID:	35
Motif name:	REST
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	10
Number of overlap:	10
Similarity score:	0.0242678

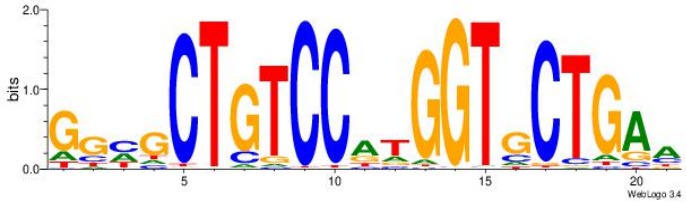
Alignment:

```
GGYGCTGTCCATGGTGCTGAA
---------DHCTTTTCHH--
```

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC



Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA



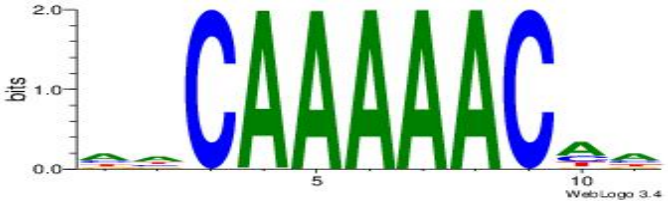
Dataset #:	4

Motif ID:	86
Motif name:	aaCAAAAACaa
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	10
Similarity score:	0.0309896

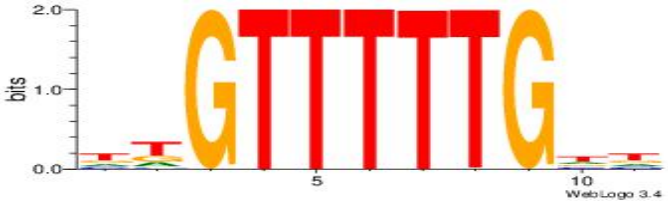
Alignment:

```
HTGTTTTTGHH
-DHCTTTTCHH
```

Original motif Consensus sequence: HHCAAAAACAH



Reverse complement motif Consensus sequence: HTGTTTTTGHH

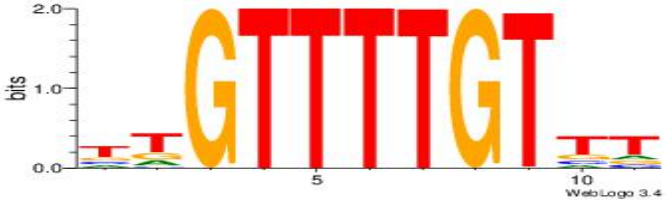


Dataset #:	4
Motif ID:	69
Motif name:	aaACAAAACaa
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0311578

Alignment:
TTGTTTTGTTT
DHCTTTTCHH-

Original motif Consensus sequence: AAACAAAACAA

Reverse complement motif Consensus sequence: TTGTTTTGTTT

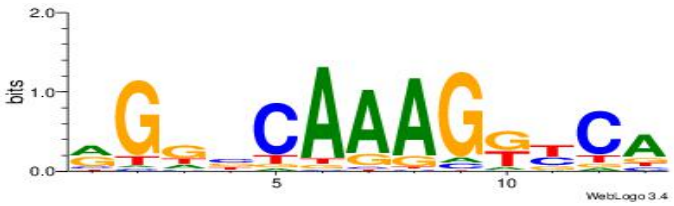


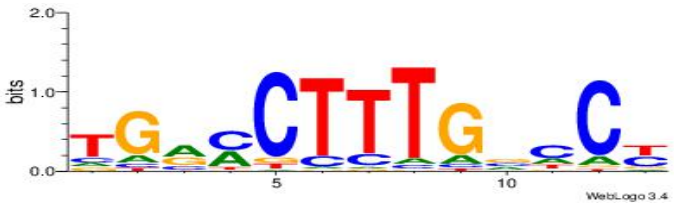
Dataset #:	3
Motif ID:	50
Motif name:	HNF4A
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.03324

Alignment:
RGGBCAAAGKYCA
--DHGAAAAGHD-

Original motif Consensus sequence: RGGBCAAAGKYCA

Reverse complement motif Consensus sequence: TGMYCTTTGBCCK



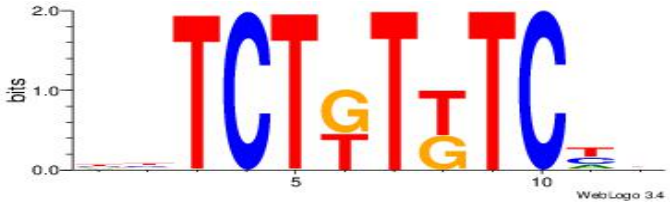


Dataset #:	4
Motif ID:	92
Motif name:	tyTCTkTkTCyy
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0365489

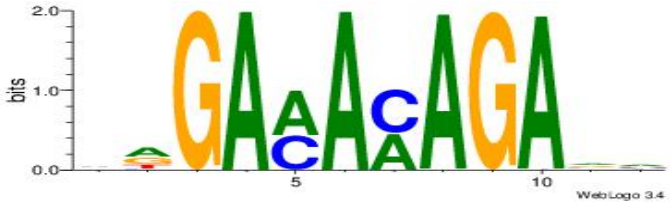
Alignment:

```
BBTCTKTKTCHB
-DHCTTTTCHH-
```

Original motif Consensus sequence: BBTCTKTKTCHB



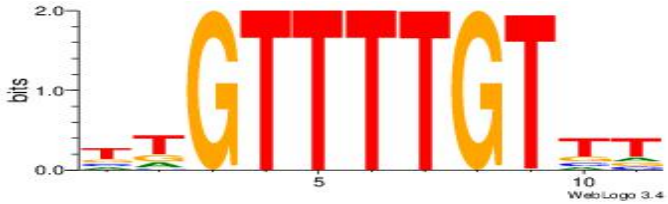
Reverse complement motif Consensus sequence: VHGARAYAGAVV



Dataset #: 4 Motif ID: 69 Motif name: aaACAAAACaa

Original motif Consensus sequence: AAACAAAACAA

Reverse complement motif Consensus sequence: TTGTTTTGTTT



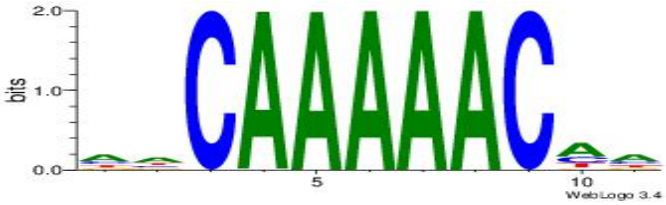
Best Matches for Motif ID 69 (Highest to Lowest)

Dataset #:	4
Motif ID:	86
Motif name:	aaCAAAAACaa
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.00867165

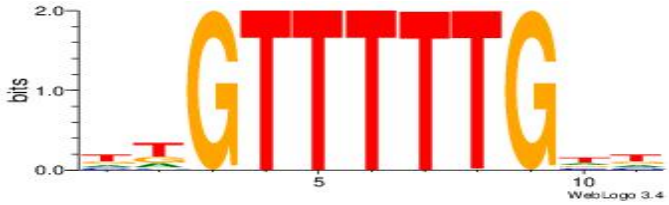
Alignment:

```
HTGTTTTTGHH
TTGTTTTGTTT
```

Original motif Consensus sequence: HHCAAAAACAH



Reverse complement motif Consensus sequence: HTGTTTTTGHH



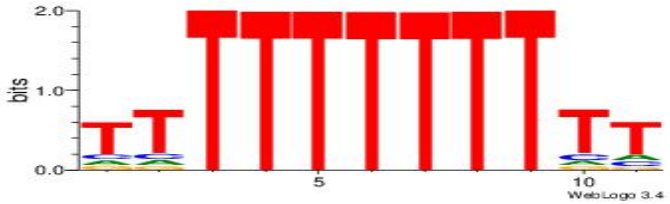
Dataset #:	4
Motif ID:	102
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.0148063

Alignment:

```
AAAAAAAAAAA
AAACAAAACAA
```

Original motif Consensus sequence: AAAAAAAAAAA

Reverse complement motif Consensus sequence: TTTTTTTTTTT

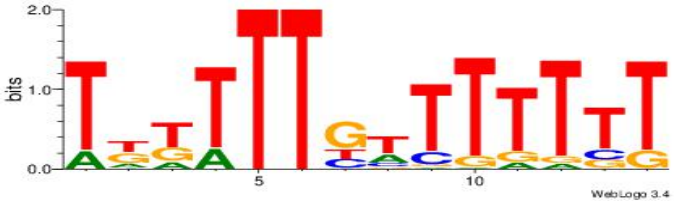


Dataset #:	2
Motif ID:	26
Motif name:	Motif 26
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11

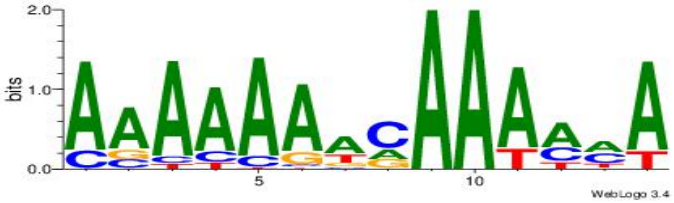
Similarity score: 0.0458549

Alignment:
AAAAAAACAAARRA
AAACAAAACAA---

Original motif Consensus sequence: TKKTTTGTTTTTTT



Reverse complement motif Consensus sequence: AAAAAAACAAARR

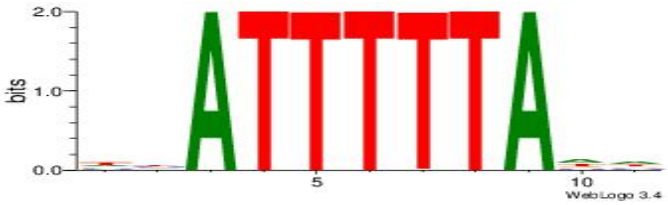


Dataset #: 4
Motif ID: 85
Motif name: wtATTTTTAww
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 11
Similarity score: 0.046421

Alignment:
DHATTTTTADD
TTGTTTTGTTT

Original motif Consensus sequence: DHATTTTTADD

Reverse complement motif Consensus sequence: DDTAAAAATHD



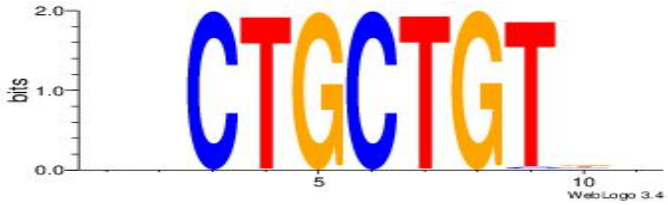
Dataset #:	4
Motif ID:	82
Motif name:	rmACAGCAGsr
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.052053

Alignment:

```
VVACAGCAGVD
AAACAAAACAA
```

Original motif Consensus sequence: VVACAGCAGVD

Reverse complement motif Consensus sequence: DVCTGCTGTVB



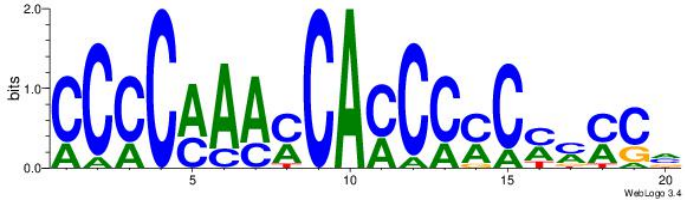
Dataset #:	3
Motif ID:	34

Motif name:	RREB1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0556289

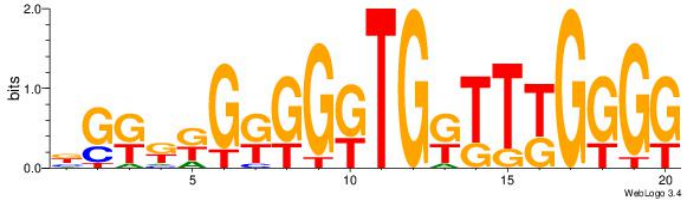
Alignment:

```
CCCCMAAMCAMCCMCMMMCV
AAACAAAACAA---------
```

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



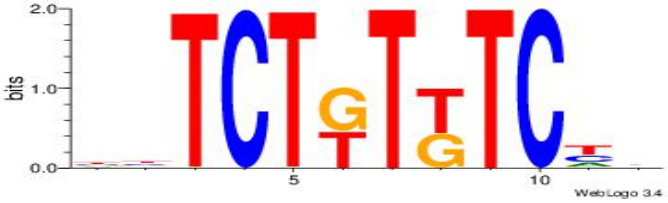
Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG



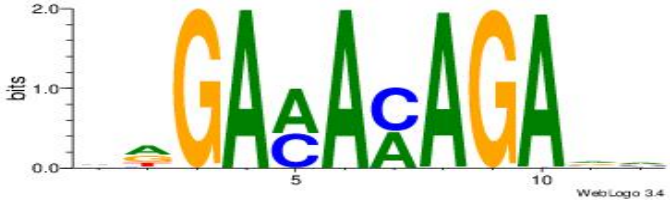
Dataset #:	4
Motif ID:	92
Motif name:	tyTCTkTkTCyy
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0592379

Alignment:
BBTCTKTKTCHB
TTGTTTTGTTT-

Original motif Consensus sequence: BBTCTKTKTCHB



Reverse complement motif Consensus sequence: VHGARAYAGAVV

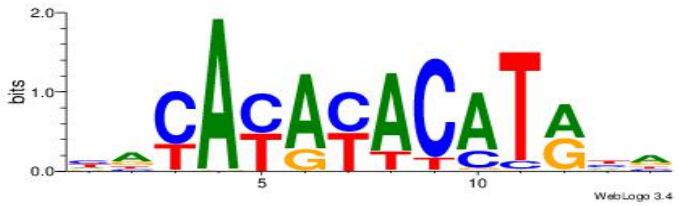


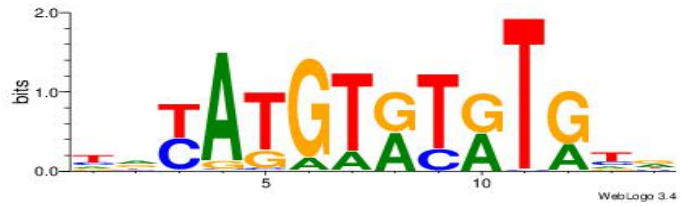
Dataset #:	4
Motif ID:	75
Motif name:	yayAyAyACATrya
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	11
Similarity score:	0.0600308

Alignment:
DHKATGTKTKTGTD
---TTGTTTTGTTT

Original motif Consensus sequence: HACAYAYACATRHD

Reverse complement motif Consensus sequence: DHKATGTKTKTGT



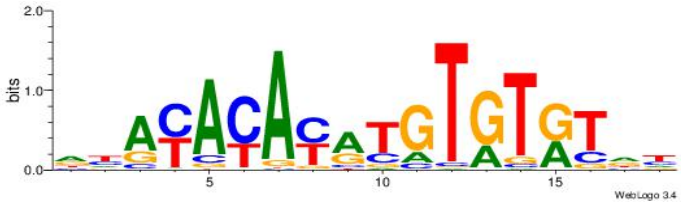


Dataset #:	4
Motif ID:	97
Motif name:	ryayAyAyrtGTRTrTry
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.0637357

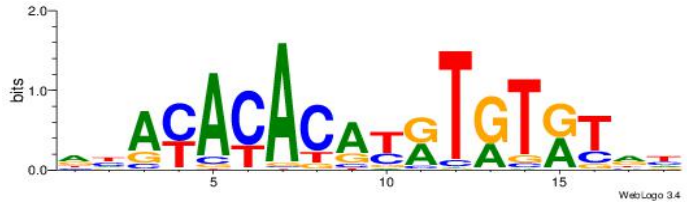
Alignment:

```
HDAMACACAKKTKTKTHD
-------TTGTTTTGTTT
```

Original motif Consensus sequence: DHAYAYAYRTGTGTRTDH



Reverse complement motif Consensus sequence: HDAMACACAKKTKTKTHD



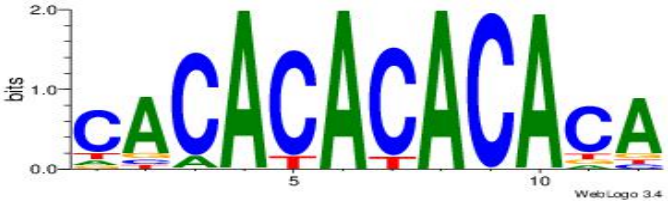
Dataset #: 4

Motif ID:	79
Motif name:	CACACACACACA
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:	0.0656255

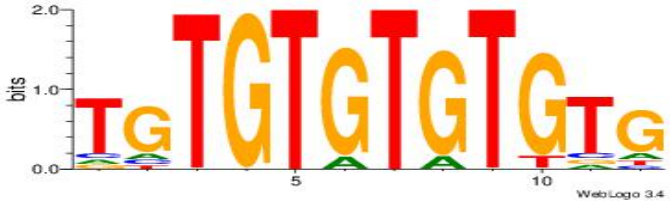
Alignment:

```
CACACACACACA
-AAACAAAACAA
```

Original motif Consensus sequence: CACACACACACA



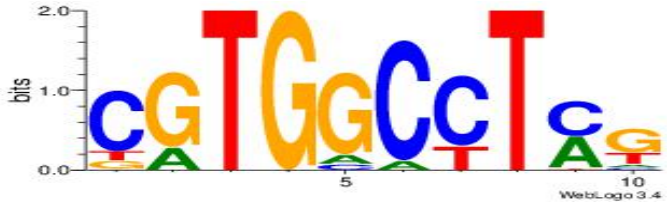
Reverse complement motif Consensus sequence: TGTGTGTGTGTG



Dataset #: 4 Motif ID: 70 Motif name: mkARGCCACG

Original motif Consensus sequence: CKAGGCCACG

Reverse complement motif Consensus sequence: CGTGGCCTYG



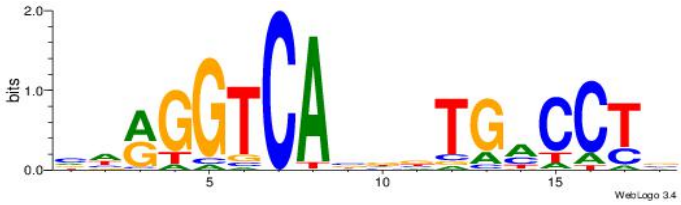
Best Matches for Motif ID 70 (Highest to Lowest)

Dataset #:	3
Motif ID:	46
Motif name:	ESR2
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:	0.0498081

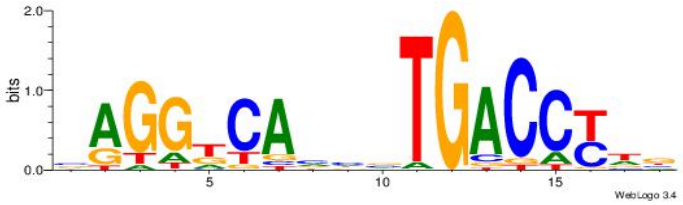
Alignment:

```
BAGGYCABHBTGACCKHV
--------CGTGGCCTYG
```

Original motif Consensus sequence: VHRGGTCABDBTGMCCTB



Reverse complement motif Consensus sequence: BAGGYCABHBTGACCKHV



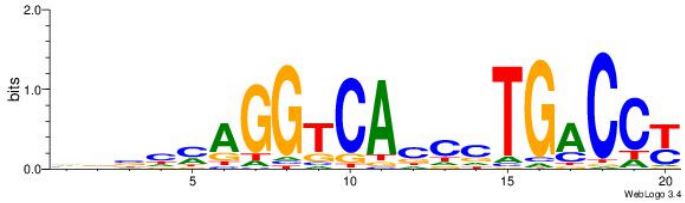
Dataset #:	3
Motif ID:	45
Motif name:	ESR1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement

Direction:	Backward
Position number:	4
Number of overlap:	10
Similarity score:	0.0634965

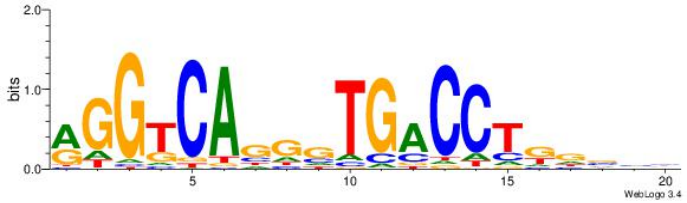
Alignment:

```
MGGTCAGGGTGACCTRDBHV
-------CGTGGCCTYG---
```

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY



Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV

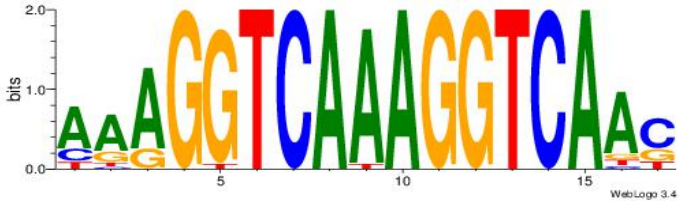


Dataset #:	3
Motif ID:	59
Motif name:	NR1H2RXRA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	8
Number of overlap:	10
Similarity score:	0.0768331

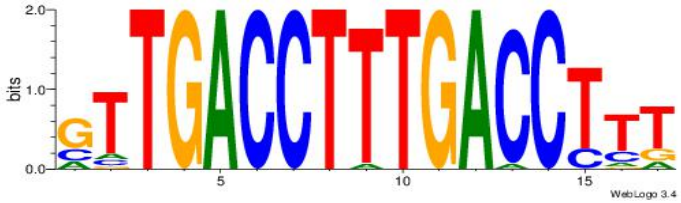
Alignment:

```
GTTGACCTTTGACCTTT
CGTGGCCTYG-------
```

Original motif Consensus sequence: AAAGGTCAAAGGTCAAC



Reverse complement motif Consensus sequence: GTTGACCTTTGACCTTT

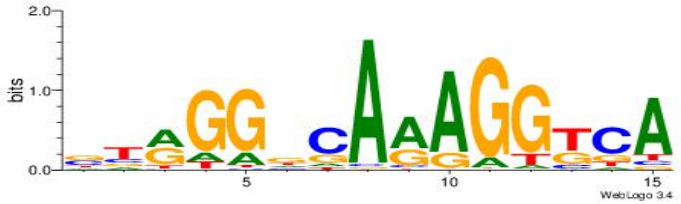


Dataset #:	3
Motif ID:	36
Motif name:	PPARGRXRA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	10
Similarity score:	0.0829671

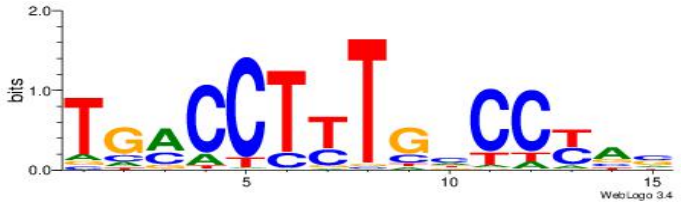
Alignment:

```
TGRCCTKTGHCCKAB
-----CGTGGCCTYG
```

Original motif Consensus sequence: BTRGGDCARAGGKCA



Reverse complement motif Consensus sequence: TGRCCTKTGHCCK

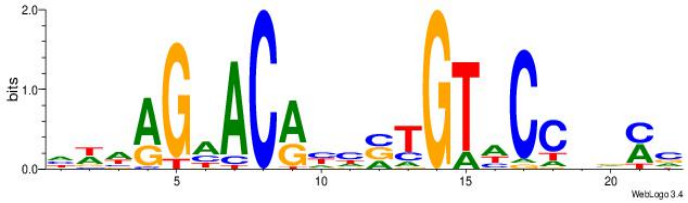


Dataset #:	3
Motif ID:	40
Motif name:	Ar
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	12
Number of overlap:	10
Similarity score:	0.0846072

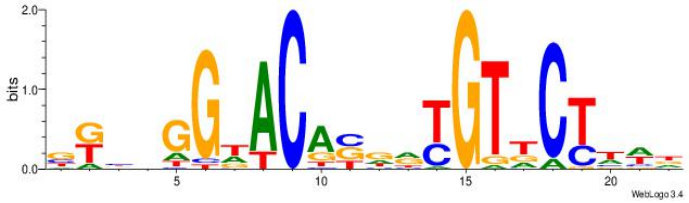
Alignment:

```
VRVDGGHACAVDDKGTHCTDWH
-----------CGTGGCCTYG-
```

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH



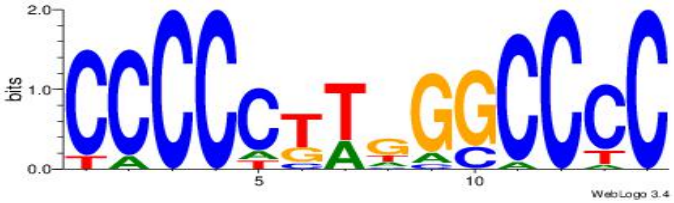
Dataset #:	3
Motif ID:	37
Motif name:	PLAG1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1

Number of overlap: 10
Similarity score: 0.0859542

Alignment:
GGGGCCCAAGGGGG
----CGTGGCCTYG

Original motif Consensus sequence: GGGGCCCAAGGGGG

Reverse complement motif Consensus sequence: CCCCCTTGGGCCC

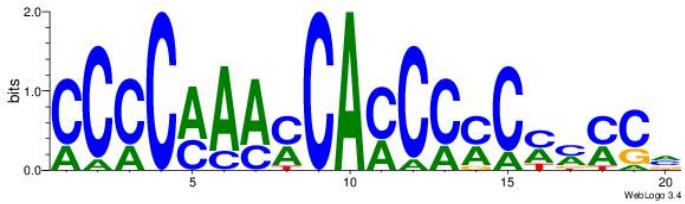


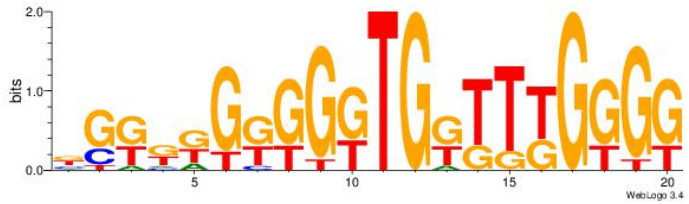
Dataset #: 3
Motif ID: 34
Motif name: RREB1
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 3
Number of overlap: 10
Similarity score: 0.0865308

Alignment:
BGRRRGRGGRTGRTTYGGGG
--------CGTGGCCTYG--

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV

Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG



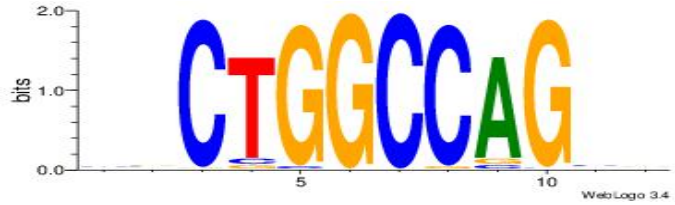


Dataset #:	4
Motif ID:	99
Motif name:	sgCTGGCCAGcs
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	10
Similarity score:	0.0870749

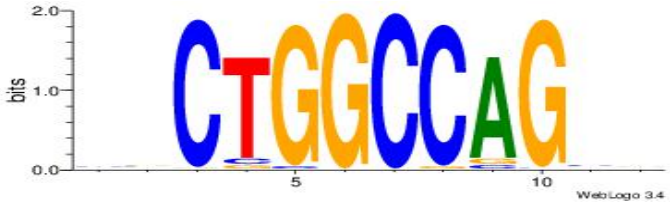
Alignment:

```
VVCTGGCCAGBB
-CKAGGCCACG-
```

Original motif Consensus sequence: BBCTGGCCAGVV



Reverse complement motif Consensus sequence: VVCTGGCCAGBB



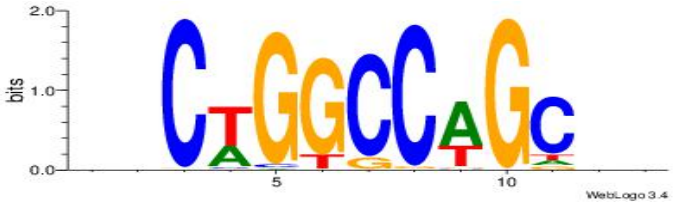
Dataset #:	4
Motif ID:	80

Motif name:	ssCwGGCCwGCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0877916

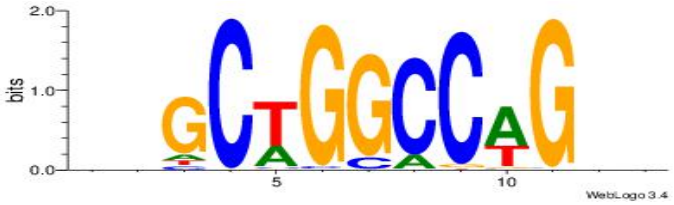
Alignment:

```
BBGCTGGCCWGBB
--CGTGGCCTYG-
```

Original motif Consensus sequence: BBCWGGCCAGCBB



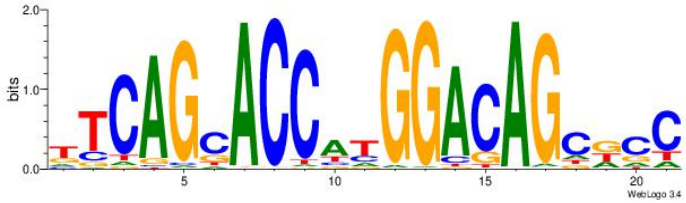
Reverse complement motif Consensus sequence: BBGCTGGCCWGBB



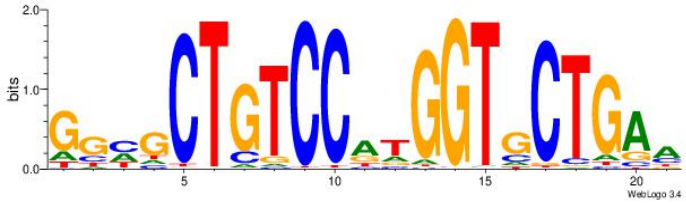
Dataset #:	3
Motif ID:	35
Motif name:	REST
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	10
Similarity score:	0.0882064

Alignment:
GGYGCTGTCCATGGTGCTGAA
---CGTGGCCTYG--------

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC



Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA



Dataset #: 4 Motif ID: 71 Motif name: wyATTTTAww

Original motif Consensus sequence: DHATTTTADD

Reverse complement motif Consensus sequence: DDTAAAATHD

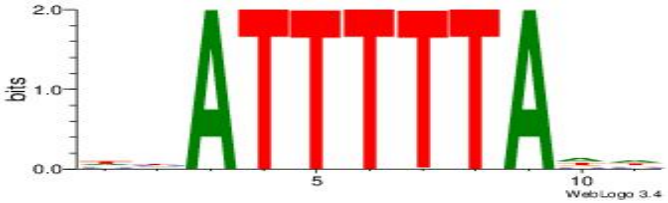
Best Matches for Motif ID 71 (Highest to Lowest)

Dataset #:	4
Motif ID:	85
Motif name:	wtATTTTTAww
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward

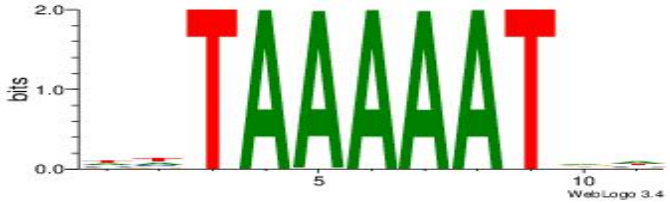
Position number: 1
Number of overlap: 10
Similarity score: 0

Alignment:
DHATTTTTADD
DHATTTTADD-

Original motif Consensus sequence: DHATTTTTADD



Reverse complement motif Consensus sequence: DDTAAAAATHD

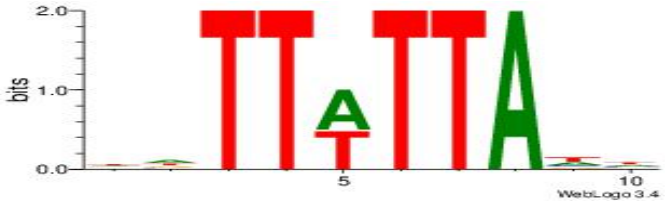


Dataset #: 4
Motif ID: 81
Motif name: wwTAAwAAww
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 10
Similarity score: 0.00285443

Alignment:
DDTAAWAAHH
DDTAAAATHD

Original motif Consensus sequence: DDTAAWAAHH

Reverse complement motif Consensus sequence: HHTTWTTADD



Dataset #:	4
Motif ID:	83
Motif name:	wwTAAAwAww
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:	0.00437246

Alignment:

```
DDTAAAWAHH
DDTAAAATHD
```

Original motif Consensus sequence: DDTAAAWAHH

Reverse complement motif Consensus sequence: HHTWTTTADD

Dataset #:	4

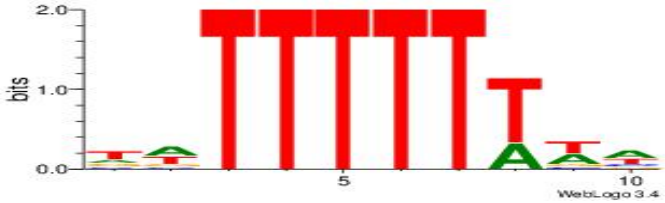
Motif ID:	76
Motif name:	wwWAAAAAwa
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0153432

Alignment:

```
WWAAAAAAWH
DDTAAAATHD
```

Original motif Consensus sequence: WWAAAAAAWH

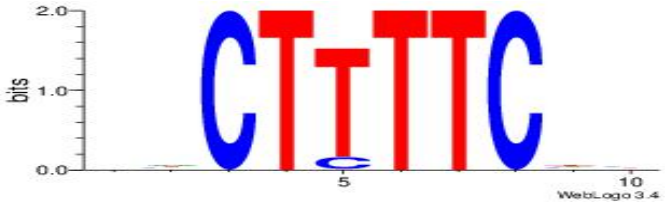
Reverse complement motif Consensus sequence: HWTTTTTTWW



Dataset #:	4
Motif ID:	68
Motif name:	dwCTTTTCwy
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0177129

Alignment:
DHGAAAAGHD
DDTAAAATHD

Original motif Consensus sequence: DHCTTTTCHH



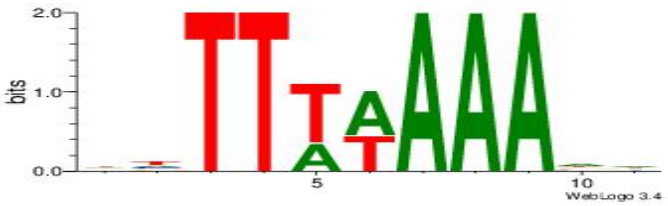
Reverse complement motif Consensus sequence: DHGAAAAGHD

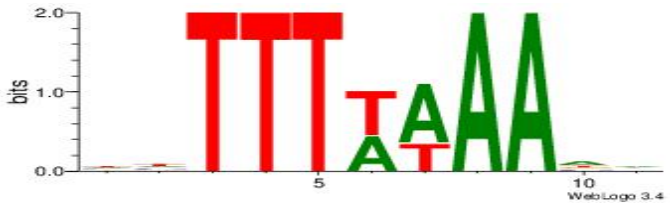
Dataset #:	4
Motif ID:	104
Motif name:	wtTTWwAAAaw
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0302024

Alignment:
DDTTTWAAAHH
DHATTTTADD-

Original motif Consensus sequence: HHTTTWAAADD

Reverse complement motif Consensus sequence: DDTTTWAAAHH





Dataset #:	4
Motif ID:	74
Motif name:	twTACATAvw
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0367109

Alignment:

```
DBTATGTAHH
DHATTTTADD
```

Original motif Consensus sequence: HHTACATAVD

Reverse complement motif Consensus sequence: DBTATGTAHH

Dataset #:	4
Motif ID:	86

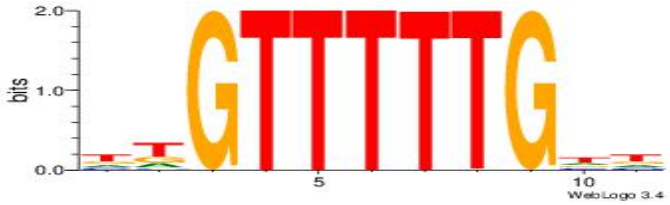
Motif name:	aaCAAAAACaa
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0372694

Alignment:

```
HHCAAAAACAH
DDTAAAATHD-
```

Original motif Consensus sequence: HHCAAAAACAH

Reverse complement motif Consensus sequence: HTGTTTTTGHH

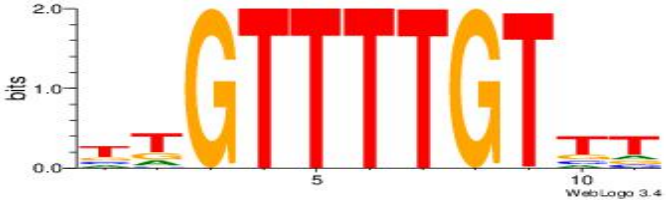


Dataset #:	4
Motif ID:	69
Motif name:	aaACAAAACaa
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0401253

Alignment:
AAACAAAACAA
DDTAAAATHD-

Original motif Consensus sequence: AAACAAAACAA

Reverse complement motif Consensus sequence: TTGTTTTGTTT

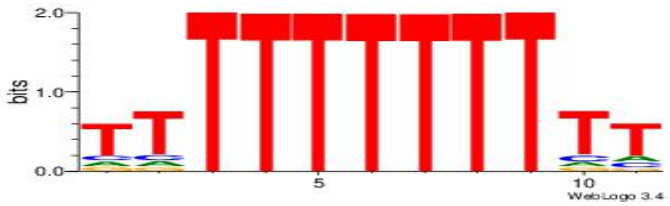


Dataset #:	4
Motif ID:	102
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0513368

Alignment:
AAAAAAAAAAA
DDTAAAATHD-

Original motif Consensus sequence: AAAAAAAAAAA

Reverse complement motif Consensus sequence: TTTTTTTTTTT



Dataset #: 4 **Motif ID: 72** **Motif name: ssCKCwsCGss**

Original motif Consensus sequence: BVCGCWSCGBV

Reverse complement motif Consensus sequence: VBCGSWGCGVB

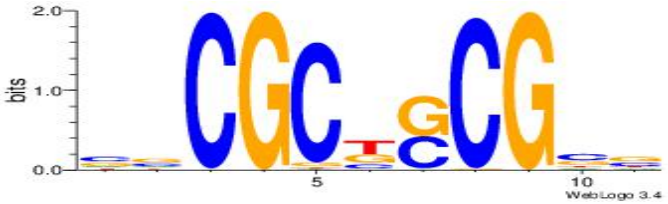
Best Matches for Motif ID 72 (Highest to Lowest)

Dataset #:	4
Motif ID:	94
Motif name:	ssCGCksCGss
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

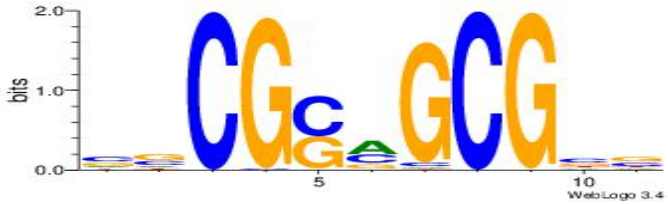
Alignment:

```
VVCGCKSCGBB
BVCGCWSCGBV
```

Original motif Consensus sequence: VVCGCKSCGBB



Reverse complement motif Consensus sequence: BBCGSRGCGVV

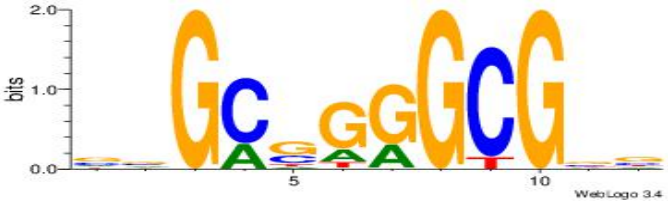


Dataset #:	4
Motif ID:	67
Motif name:	ssGMsGRGCGss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	11
Similarity score:	0.0297341

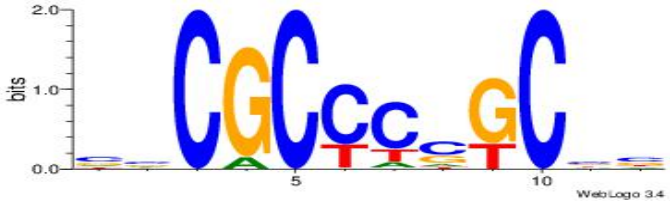
Alignment:

```
VVGCSGGGCGBB
VBCGSWGCGVB-
```

Original motif Consensus sequence: VVGCSGGGCGBB



Reverse complement motif Consensus sequence: BBCGCCCSGCVV

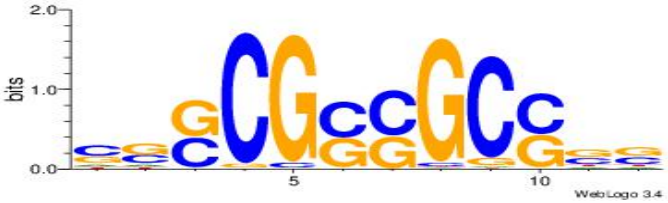


Dataset #:	4
Motif ID:	78
Motif name:	sssCGssGCsss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.0348528

Alignment:

```
SSSCGSSGCSSS
-VBCGSWGCGVB
```

Original motif Consensus sequence: SSSCGSSGCSSS



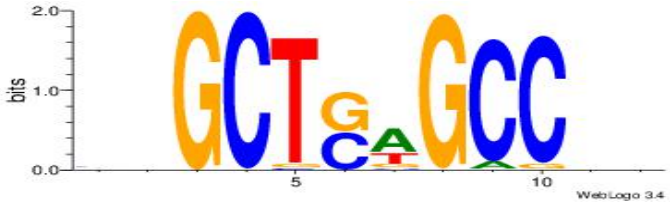
Reverse complement motif Consensus sequence: SSSGCSSCGSSS

Dataset #:	4
Motif ID:	77
Motif name:	ssGCTswGCCms
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11

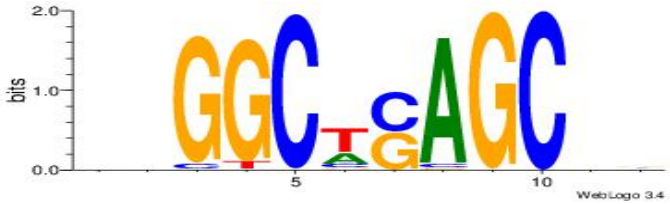
Similarity score: 0.0369739

Alignment:
BDGGCTSAGCBV
BVCGCWSCGBV-

Original motif Consensus sequence: VBGCTSAGCCHB



Reverse complement motif Consensus sequence: BDGGCTSAGCBV

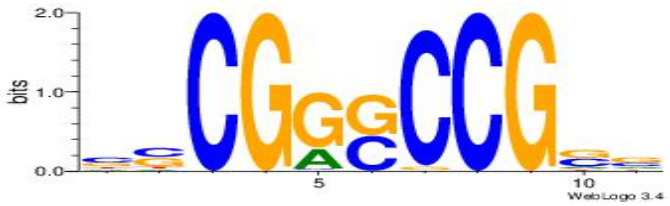


Dataset #: 4
Motif ID: 87
Motif name: ssCGGsYCGss
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 11
Similarity score: 0.040396

Alignment:
BSCGGSCCGSV
BVCGCWSCGBV

Original motif Consensus sequence: BSCGGSCCGSV

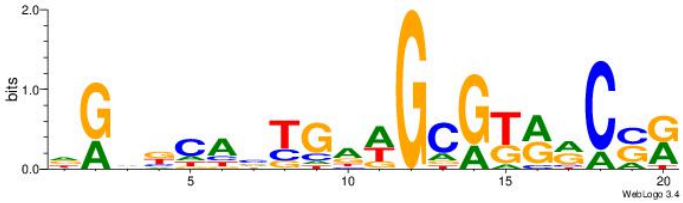
Reverse complement motif Consensus sequence: VSCGGSCCGSB



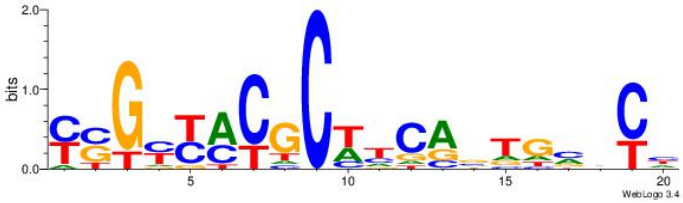
Dataset #: 3
Motif ID: 61
Motif name: Pax5
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 6
Number of overlap: 11
Similarity score: 0.049995

Alignment:
MSGKKRCGCWDCABTGBBCD
-----BVCGCWSCGBV----

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR



Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD



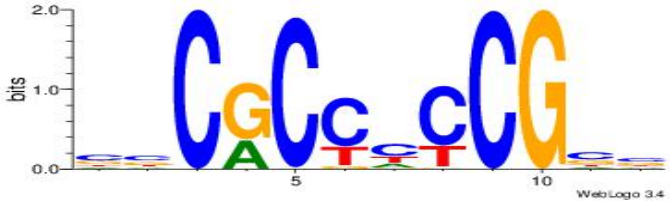
Dataset #: 4

Motif ID:	88
Motif name:	ssCrCYyYCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0534664

Alignment:

```
BBCRCCYCCGBB
BVCGCWSCGBV-
```

Original motif Consensus sequence: BBCRCCYCCGBB



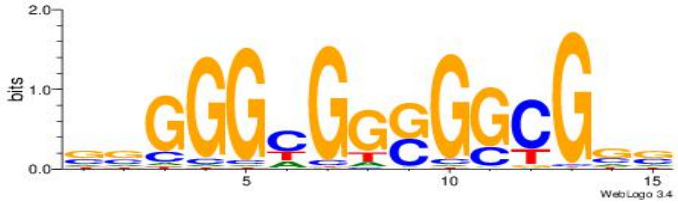
Reverse complement motif Consensus sequence: BBCGGKGGMGBB

Dataset #:	4
Motif ID:	91
Motif name:	ssCGCCsCCrCCCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	11
Similarity score:	0.0556993

Alignment:
SSGGGCGGSGGCGSS
----VBCGSWGCGVB

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS

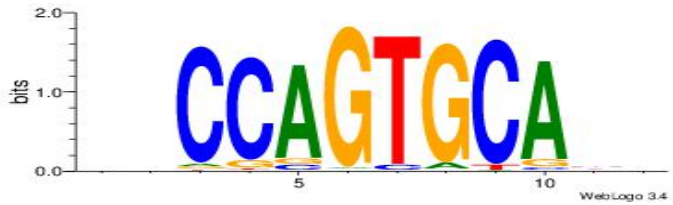


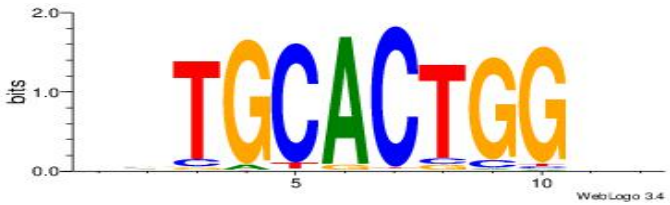
Dataset #:	4
Motif ID:	103
Motif name:	ccCCAGTGCAbr
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.0575189

Alignment:
HVCCAGTGCABD
-VBCGSWGCGVB

Original motif Consensus sequence: HVCCAGTGCABD

Reverse complement motif Consensus sequence: DBTGCACTGGVD



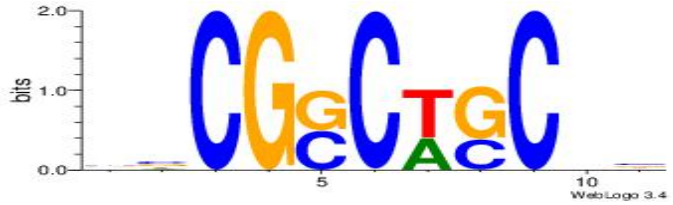


Dataset #:	4
Motif ID:	90
Motif name:	ssCGsCwsCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0590938

Alignment:

```
BBGSWGSCGBB
BVCGCWSCGBV
```

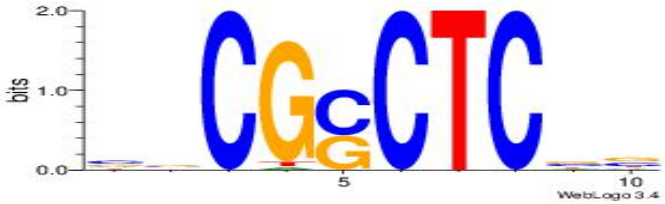
Original motif Consensus sequence: BBCGSCWSCBB



Reverse complement motif Consensus sequence: BBGSWGSCGBB

Dataset #: 4 Motif ID: 73 Motif name: ssCGsCTCss

Original motif Consensus sequence: VVCGSCTCBB



Reverse complement motif Consensus sequence: BBGAGSCGVV

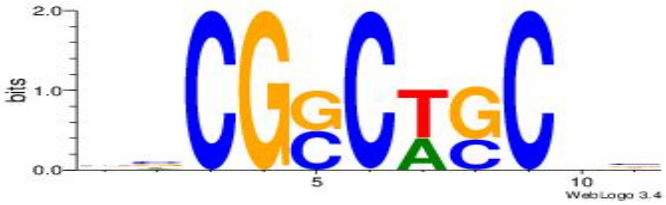
Best Matches for Motif ID 73 (Highest to Lowest)

Dataset #:	4
Motif ID:	90
Motif name:	ssCGsCwsCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	10
Similarity score:	0

Alignment:

```
BBGSWGSCGBB
-BBGAGSCGVV
```

Original motif Consensus sequence: BBCGSCWSCBB



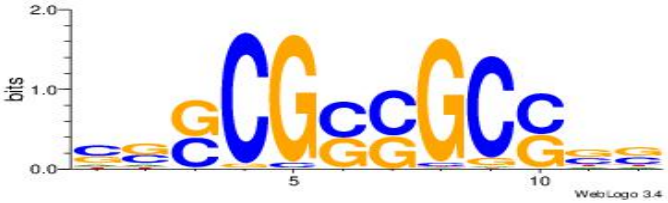
Reverse complement motif Consensus sequence: BBGSWGSCGBB

Dataset #:	4
Motif ID:	78
Motif name:	sssCGssGCsss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0108856

Alignment:

```
SSSCGSSGCSSS
-VVCGSCTCBB-
```

Original motif Consensus sequence: SSSCGSSGCSSS



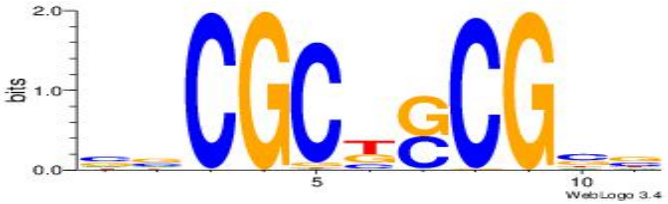
Reverse complement motif Consensus sequence: SSSGCSSCGSSS

Dataset #:	4
Motif ID:	94
Motif name:	ssCGCksCGss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	10

Similarity score: 0.0139257

Alignment:
VVCGCKSCGBB
-BBGAGSCGVV

Original motif Consensus sequence: VVCGCKSCGBB



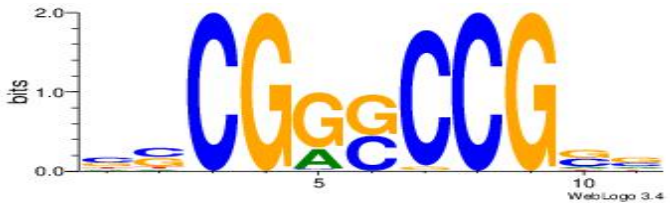
Reverse complement motif Consensus sequence: BBCGSRGCGVV

Dataset #: 4
Motif ID: 87
Motif name: ssCGGsYCGss
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 2
Number of overlap: 10
Similarity score: 0.0162661

Alignment:
BSCGGSCCGSV
VVCGSCTCBB-

Original motif Consensus sequence: BSCGGSCCGSV

Reverse complement motif Consensus sequence: VSCGGSCCGSB

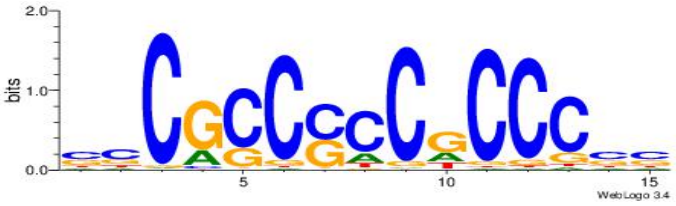


Dataset #:	4
Motif ID:	91
Motif name:	ssCGCCsCCrCCCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	10
Similarity score:	0.0236639

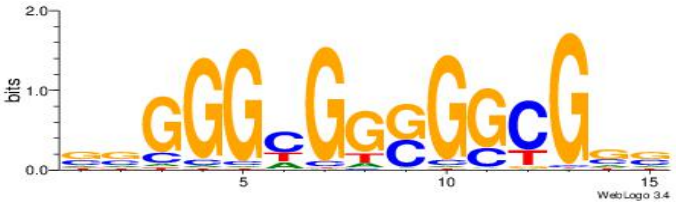
Alignment:

```
SSCGCCSCCGCCCSS
VVCGSCTCBB-----
```

Original motif Consensus sequence: SSCGCCSCCGCCCSS



Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS



Dataset #:	4

Motif ID:	66
Motif name:	ssCGssCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0241432

Alignment:

```
BSCGSSCGSV
VVCGSCTCBB
```

Original motif Consensus sequence: BSCGSSCGSV

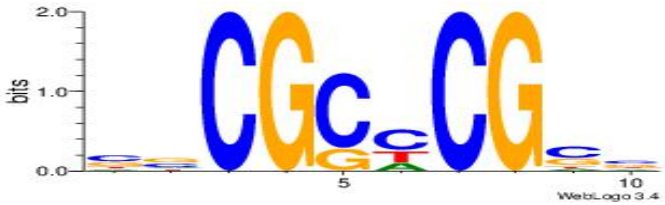
Reverse complement motif Consensus sequence: VSCGSSCGSB

Dataset #:	4
Motif ID:	65
Motif name:	ssCGrGCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0252915

Alignment:
VBCGCMCGSV
VVCGSCTCBB

Original motif Consensus sequence: VSCGRGCGBV

Reverse complement motif Consensus sequence: VBCGCMCGSV

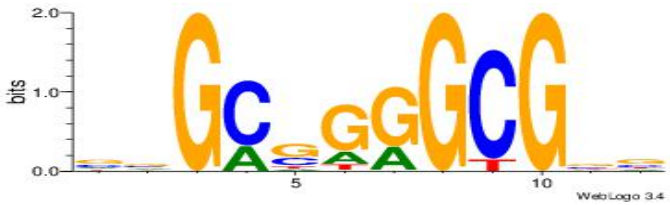


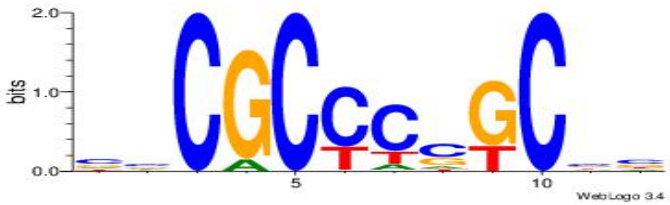
Dataset #:	4
Motif ID:	67
Motif name:	ssGMsGRGCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	10
Similarity score:	0.0315402

Alignment:
BBCGCCCSGCVV
--VVCGSCTCBB

Original motif Consensus sequence: VVGCSGGGCGBB

Reverse complement motif Consensus sequence: BBCGCCCSGCVV





Dataset #:	4
Motif ID:	72
Motif name:	ssCKCwsCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	10
Similarity score:	0.0340702

Alignment:

```
VBCGSWGCGVB
-VVCGSCTCBB
```

Original motif Consensus sequence: BVCGCWSCGBV

Reverse complement motif Consensus sequence: VBCGSWGCGVB

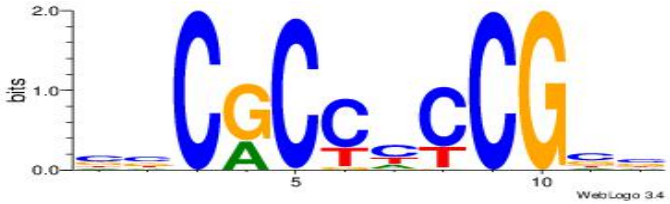
Dataset #:	4
Motif ID:	88

Motif name:	ssCrCYyYCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0353522

Alignment:

```
BBCRCCYCCGBB
VVCGSCTCBB--
```

Original motif Consensus sequence: BBCRCCYCCGBB



Reverse complement motif Consensus sequence: BBCGGKGGMGBB

Dataset #: 4 Motif ID: 74 Motif name: twTACATAvw

Original motif Consensus sequence: HHTACATAVD

Reverse complement motif Consensus sequence: DBTATGTAHH

Best Matches for Motif ID 74 (Highest to Lowest)

Dataset #:	4
Motif ID:	83
Motif name:	wwTAAAwAww
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0257442

Alignment:

```
HHTWTTTADD
DBTATGTAHH
```

Original motif Consensus sequence: DDTAAAWAHH

Reverse complement motif Consensus sequence: HHTWTTTADD

Dataset #:	4
Motif ID:	75
Motif name:	yayAyAyACATrya
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	10

Similarity score: 0.0533752

Alignment:
HACAYAYACATRHD
----HHTACATAVD

Original motif Consensus sequence: HACAYAYACATRHD

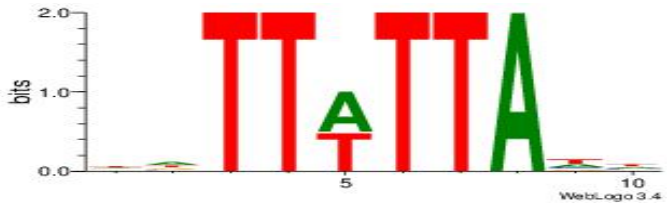
Reverse complement motif Consensus sequence: DHKATGTKTKTGT

Dataset #: 4
Motif ID: 81
Motif name: wwTAAwAAww
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 1
Number of overlap: 10
Similarity score: 0.0539475

Alignment:
HHTTWTTADD
DBTATGTAHH

Original motif Consensus sequence: DDTAAWAAHH

Reverse complement motif Consensus sequence: HHTTWTTADD

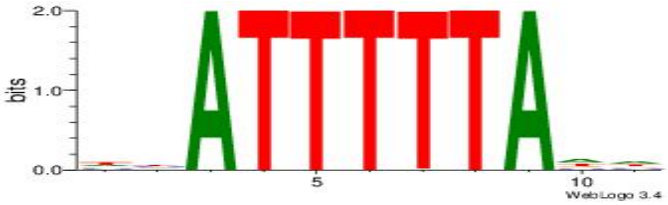


Dataset #:	4
Motif ID:	85
Motif name:	wtATTTTTAww
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	10
Similarity score:	0.0566693

Alignment:

```
DHATTTTTADD
-DBTATGTAHH
```

Original motif Consensus sequence: DHATTTTTADD



Reverse complement motif Consensus sequence: DDTAAAAATHD

Dataset #:	4
Motif ID:	71

Motif name:	wyATTTTAww
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0617069

Alignment:

```
DDTAAAATHD
HHTACATAVD
```

Original motif Consensus sequence: DHATTTTADD

Reverse complement motif Consensus sequence: DDTAAAATHD

Dataset #:	4
Motif ID:	100
Motif name:	wrTGTATACAyw
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.066134

Alignment:
HDTGTATACAHD
--DBTATGTAHH

Original motif Consensus sequence: HDTGTATACAHD

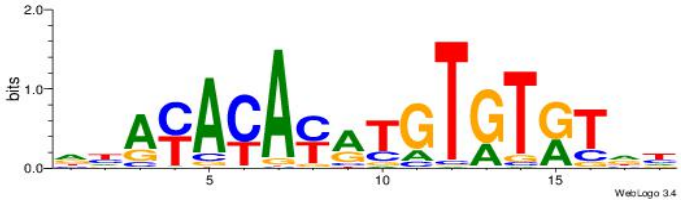
Reverse complement motif Consensus sequence: DHTGTATACADH

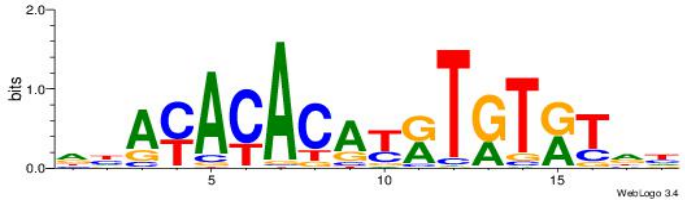
Dataset #:	4
Motif ID:	97
Motif name:	ryayAyAyrtGTRTrTry
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0685784

Alignment:
DHAYAYAYRTGTGTRTDH
-------DBTATGTAHH-

Original motif Consensus sequence: DHAYAYAYRTGTGTRTDH

Reverse complement motif Consensus sequence: HDAMACACAKKTKTKTHD





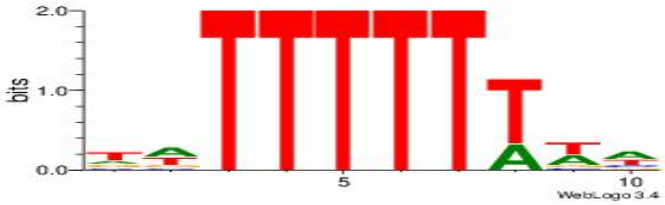
Dataset #:	4
Motif ID:	76
Motif name:	wwWAAAAAwa
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0689249

Alignment:

```
HWTTTTTTWW
DBTATGTAHH
```

Original motif Consensus sequence: WWAAAAAAWH

Reverse complement motif Consensus sequence: HWTTTTTTWW



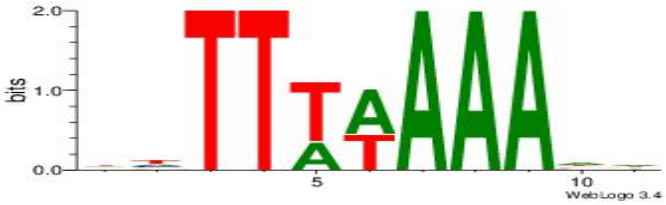
Dataset #:	4
Motif ID:	104

Motif name:	wtTTWwAAAaw
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0714832

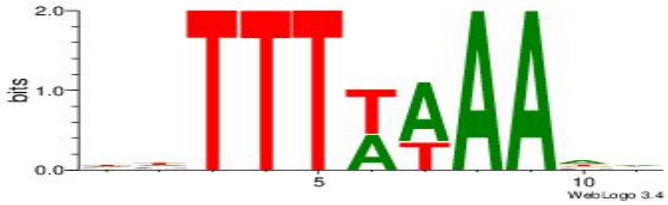
Alignment:

```
DDTTTWAAAHH
DBTATGTAHH-
```

Original motif Consensus sequence: HHTTTWAAADD



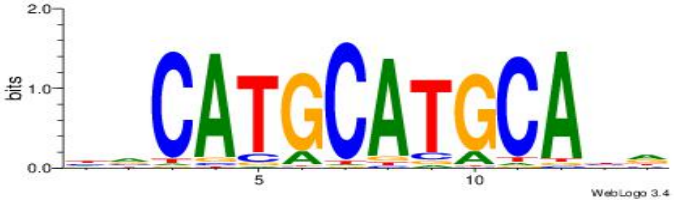
Reverse complement motif Consensus sequence: DDTTTWAAAHH



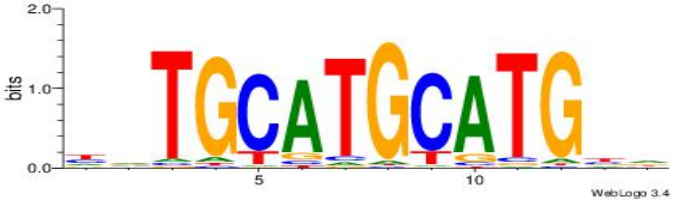
Dataset #:	4
Motif ID:	101
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0731139

Alignment:
HVCATGCATGCABD
----DBTATGTAHH

Original motif Consensus sequence: HVCATGCATGCABD



Reverse complement motif Consensus sequence: DVTGCATGCATGB



Dataset #: 4 Motif ID: 75 Motif name: yayAyAyACATrya

Original motif Consensus sequence: HACAYAYACATRHD

Reverse complement motif Consensus sequence: DHKATGTKTKTGT

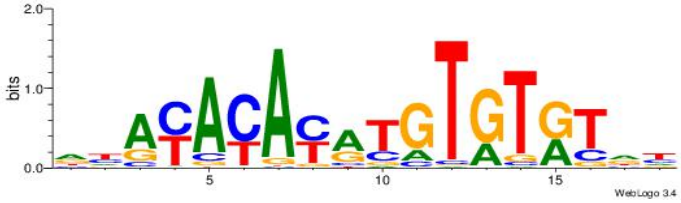
Best Matches for Motif ID 75 (Highest to Lowest)

Dataset #:	4
Motif ID:	97
Motif name:	ryayAyAyrtGTRTrTry
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4

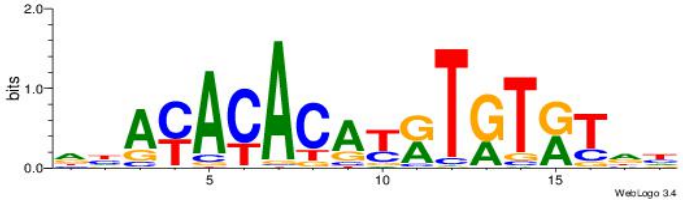
Number of overlap: 14
Similarity score: 0.00454532

Alignment:
DHAYAYAYRTGTGTRTDH
-HACAYAYACATRHD---

Original motif Consensus sequence: DHAYAYAYRTGTGTRTDH



Reverse complement motif Consensus sequence: HDAMACACAKKTKTKTHD

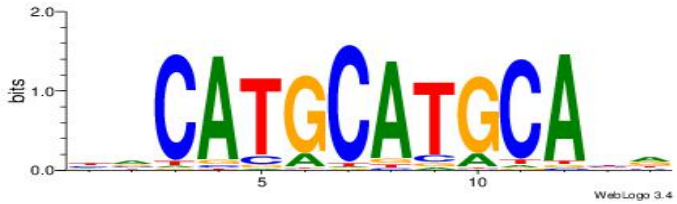


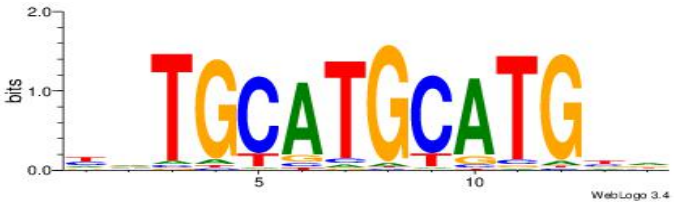
Dataset #: 4
Motif ID: 101
Motif name: AAAAAAAAAAA
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 14
Similarity score: 0.0308807

Alignment:
HVCATGCATGCABD
HACAYAYACATRHD

Original motif Consensus sequence: HVCATGCATGCABD

Reverse complement motif Consensus sequence: DVTGCATGCATGB



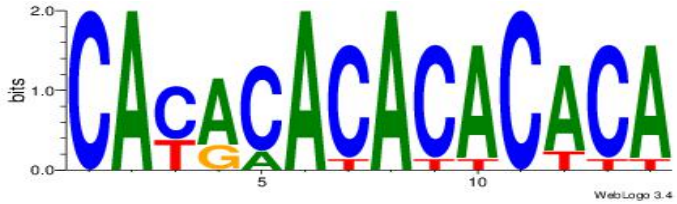


Dataset #:	2
Motif ID:	27
Motif name:	Motif 27
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0331837

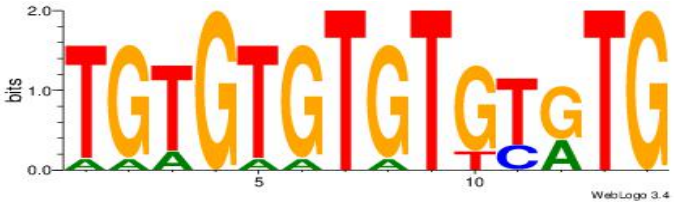
Alignment:

```
CAYACACACACACA
HACAYAYACATRHD
```

Original motif Consensus sequence: CAYACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTKT



Dataset #:	2
Motif ID:	25

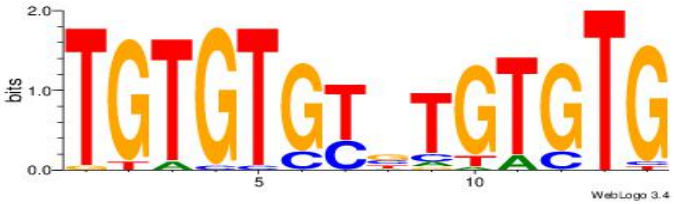
Motif name:	Motif 25
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0402474

Alignment:

CACACAVRCACACA
HACAYAYACATRHD

Original motif Consensus sequence: CACACAVRCACACA

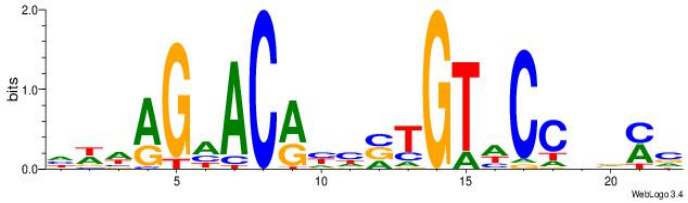
Reverse complement motif Consensus sequence: TGTGTGKVTGTGT



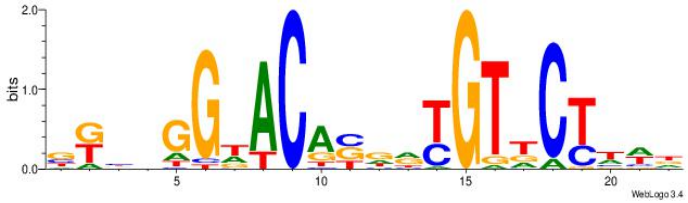
Dataset #:	3
Motif ID:	40
Motif name:	Ar
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0442476

Alignment:
HWDAGHACRHHVTGTHCCHVMV
DHKATGTKTKTGTD--------

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH

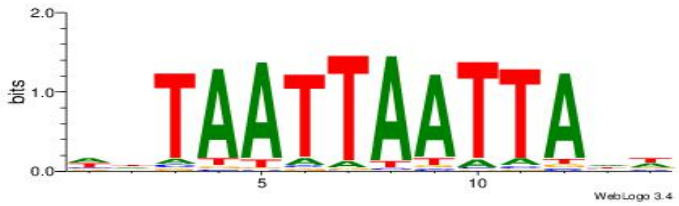


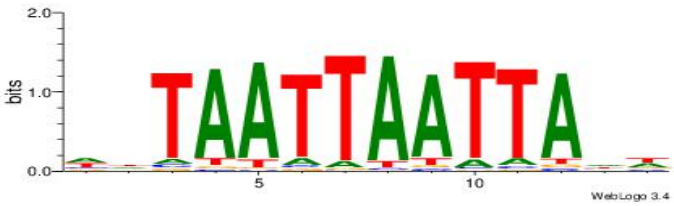
Dataset #:	4
Motif ID:	98
Motif name:	wwTAATTAATTAww
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0490963

Alignment:
HDTAATTAATTAHD
HACAYAYACATRHD

Original motif Consensus sequence: HDTAATTAATTAHD

Reverse complement motif Consensus sequence: DHTAATTAATTADH



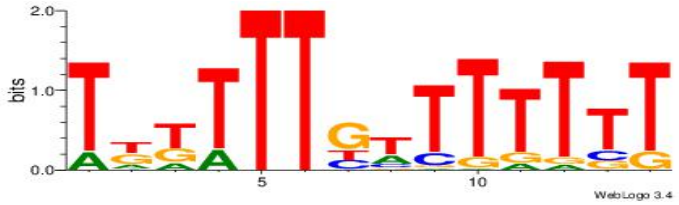


Dataset #:	2
Motif ID:	26
Motif name:	Motif 26
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0493713

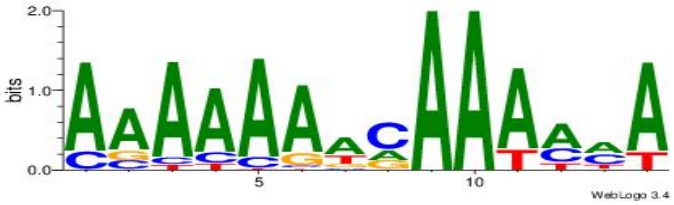
Alignment:

```
AAAAAAACAAARRA
HACAYAYACATRHD
```

Original motif Consensus sequence: TKKTTTGTTTTTTT



Reverse complement motif Consensus sequence: AAAAAAACAAARR



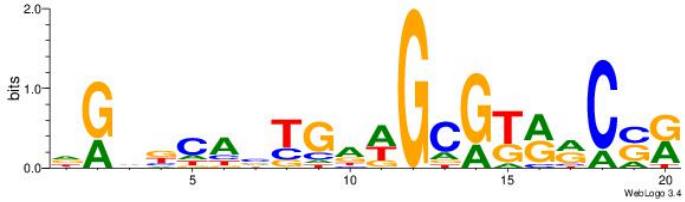
Dataset #:	3
Motif ID:	61

Motif name:	Pax5
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	14
Similarity score:	0.0516607

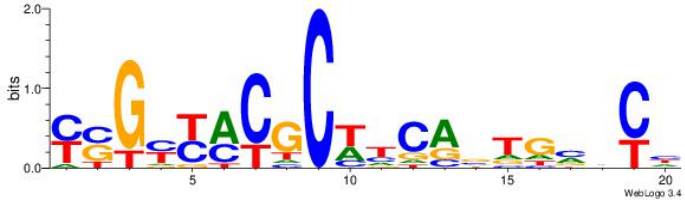
Alignment:

```
DGVBCABTGDWGCGKRRCSR
----DHKATGTKTKTGTD--
```

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR



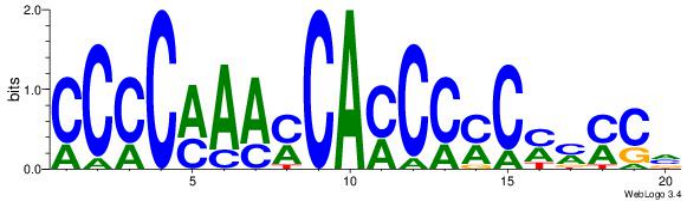
Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD



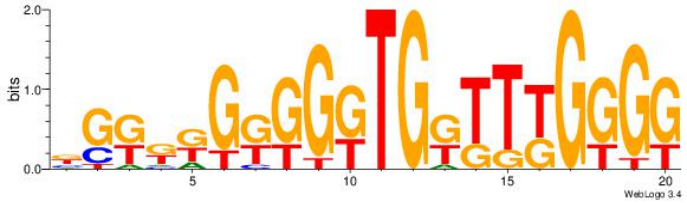
Dataset #:	3
Motif ID:	34
Motif name:	RREB1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	7
Number of overlap:	14
Similarity score:	0.0532406

Alignment:
CCCCMAAMCAMCCMCMMMCV
------HACAYAYACATRHD

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG

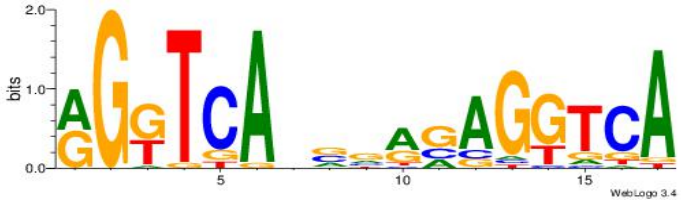


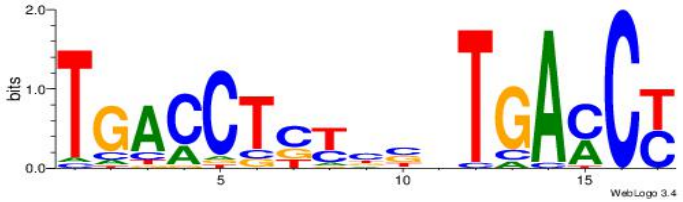
Dataset #:	3
Motif ID:	63
Motif name:	RXRRAR_DR5
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	14
Similarity score:	0.0575008

Alignment:
RGKTCABVVRGAGGTCA
--HACAYAYACATRHD-

Original motif Consensus sequence: RGKTCABVVRGAGGTCA

Reverse complement motif Consensus sequence: TGACCTCKVVBTGAYCK

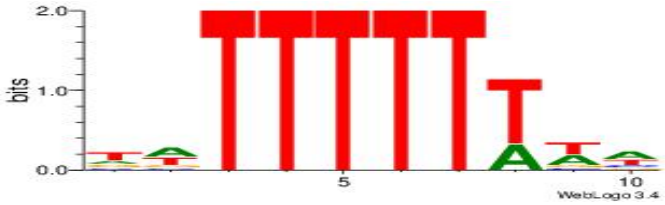




Dataset #: 4 Motif ID: 76 Motif name: wwWAAAAAwa

Original motif Consensus sequence: WWAAAAAAWH

Reverse complement motif Consensus sequence: HWTTTTTTWW



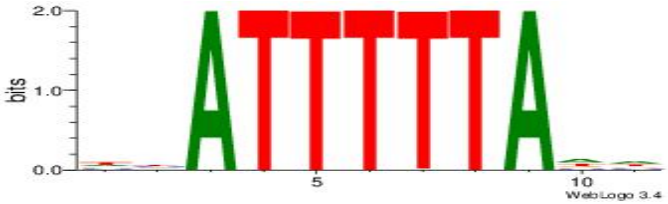
Best Matches for Motif ID 76 (Highest to Lowest)

Dataset #:	4
Motif ID:	85
Motif name:	wtATTTTTAww
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.00795084

Alignment:

```
DHATTTTTADD
-HWTTTTTTWW
```

Original motif Consensus sequence: DHATTTTTADD



Reverse complement motif Consensus sequence: DDTAAAAATHD

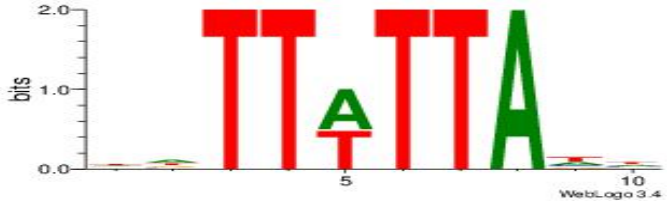
Dataset #:	4
Motif ID:	81
Motif name:	wwTAAwAAww
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0105869

Alignment:

```
DDTAAWAAHH
WWAAAAAAWH
```

Original motif Consensus sequence: DDTAAWAAHH

Reverse complement motif Consensus sequence: HHTTWTTADD



Dataset #:	4
Motif ID:	83
Motif name:	wwTAAAwAww
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0135165

Alignment:

```
DDTAAAWAHH
WWAAAAAAWH
```

Original motif Consensus sequence: DDTAAAWAHH

Reverse complement motif Consensus sequence: HHTWTTTADD

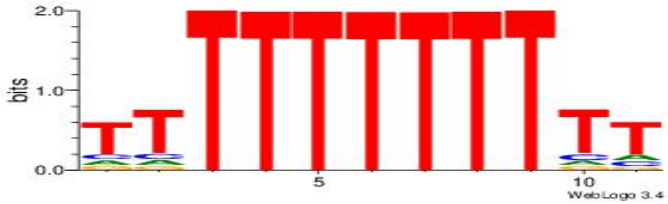
Dataset #:	4
Motif ID:	102
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10

Similarity score: 0.0137579

Alignment:
TTTTTTTTTTT
HWTTTTTTWW-

Original motif Consensus sequence: AAAAAAAAAAA

Reverse complement motif Consensus sequence: TTTTTTTTTTT

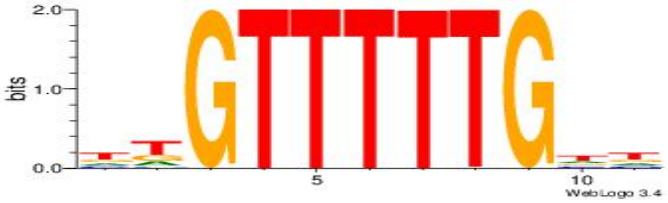


Dataset #: 4
Motif ID: 86
Motif name: aaCAAAAACaa
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 2
Number of overlap: 10
Similarity score: 0.0272712

Alignment:
HHCAAAAACAH
WWAAAAAAWH-

Original motif Consensus sequence: HHCAAAAACAH

Reverse complement motif Consensus sequence: HTGTTTTTGHH



Dataset #:	4
Motif ID:	71
Motif name:	wyATTTTAww
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0288034

Alignment:

```
DDTAAAATHD
WWAAAAAAWH
```

Original motif Consensus sequence: DHATTTTADD

Reverse complement motif Consensus sequence: DDTAAAATHD

Dataset #:	4
Motif ID:	69

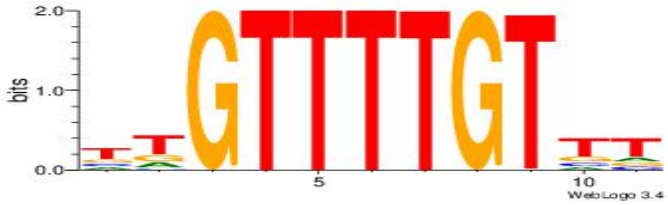
Motif name:	aaACAAAACaa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0387825

Alignment:

```
AAACAAAACAA
WWAAAAAAWH-
```

Original motif Consensus sequence: AAACAAAACAA

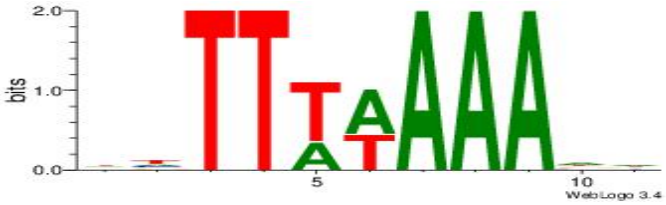
Reverse complement motif Consensus sequence: TTGTTTTGTTT



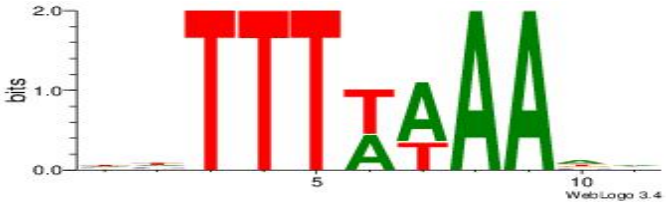
Dataset #:	4
Motif ID:	104
Motif name:	wtTTWwAAAaw
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0395975

Alignment:
HHTTTWAAADD
-WWAAAAAAWH

Original motif Consensus sequence: HHTTTWAAADD



Reverse complement motif Consensus sequence: DDTTTWAAAHH

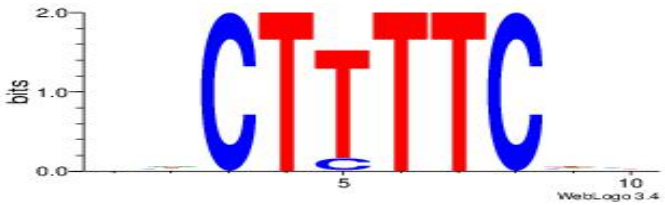


Dataset #:	4
Motif ID:	68
Motif name:	dwCTTTTCwy
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0413137

Alignment:
DHCTTTTCHH
HWTTTTTTWW

Original motif Consensus sequence: DHCTTTTCHH

Reverse complement motif Consensus sequence: DHGAAAAGHD

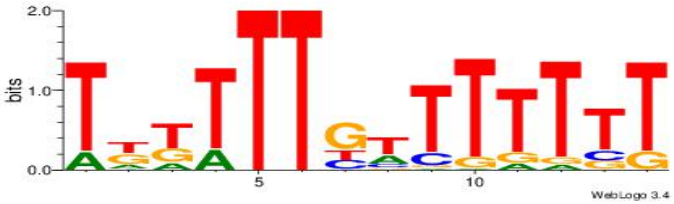


Dataset #:	2
Motif ID:	26
Motif name:	Motif 26
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0498611

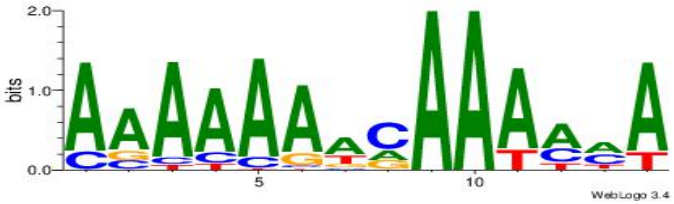
Alignment:

```
AAAAAAACAAARRA
WWAAAAAAWH----
```

Original motif Consensus sequence: TKKTTTGTTTTTTT

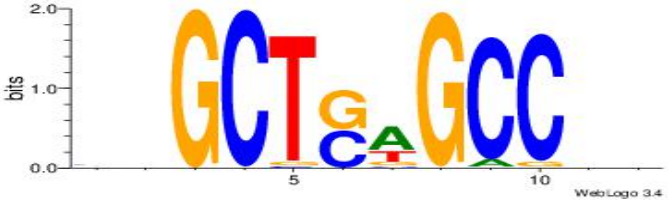


Reverse complement motif Consensus sequence: AAAAAAACAAARR

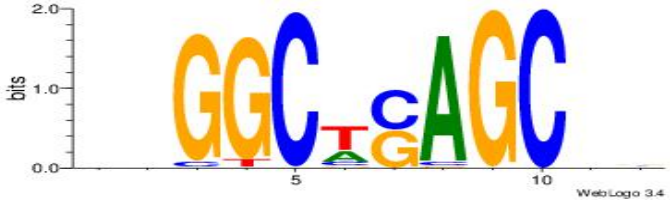


Dataset #: 4 Motif ID: 77 Motif name: ssGCTswGCCms

Original motif Consensus sequence: VBGCTSAGCCHB



Reverse complement motif Consensus sequence: BDGGCTSAGCBV



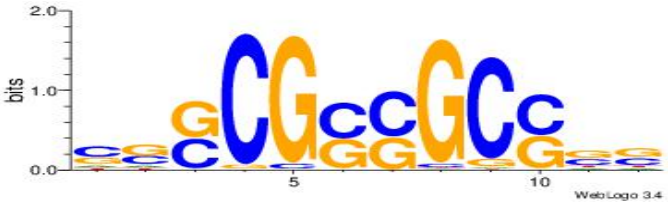
Best Matches for Motif ID 77 (Highest to Lowest)

Dataset #:	4
Motif ID:	78
Motif name:	sssCGssGCsss
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:	0.0634646

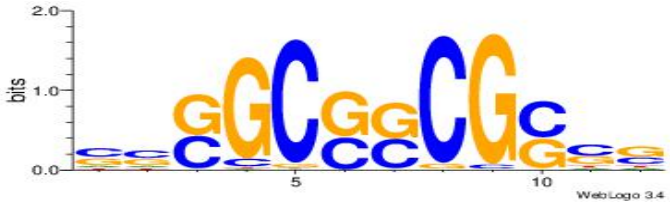
Alignment:

```
SSSCGSSGCSSS
VBGCTSAGCCHB
```

Original motif Consensus sequence: SSSCGSSGCSSS



Reverse complement motif Consensus sequence: SSSGCSSCGSSS



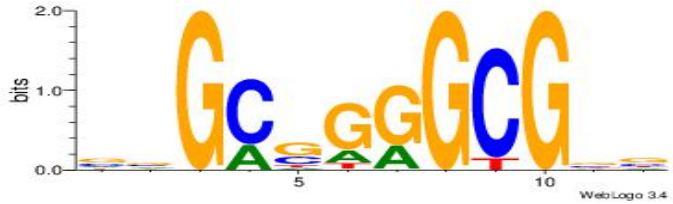
Dataset #:	4
Motif ID:	67
Motif name:	ssGMsGRGCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.0636848

Alignment:

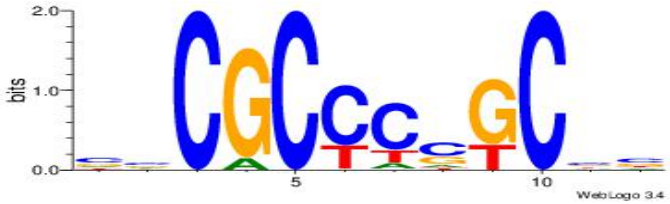
VVGCSGGGCGBB

VBGCTSAGCCHB

Original motif Consensus sequence: VVGCSGGGCGBB



Reverse complement motif Consensus sequence: BBCGCCCSGCVV

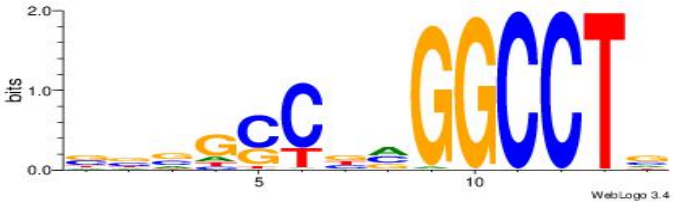


Dataset #:	3
Motif ID:	28
Motif name:	Zfx
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	12

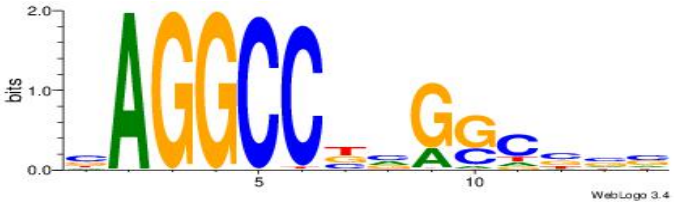
Similarity score: 0.075549

Alignment:
BBVGCCBVGGCCTV
--VBGCTSAGCCHB

Original motif Consensus sequence: BBVGCCBVGGCCTV



Reverse complement motif Consensus sequence: VAGGCCBBGGCVB

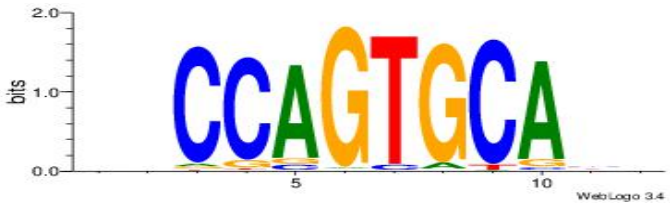


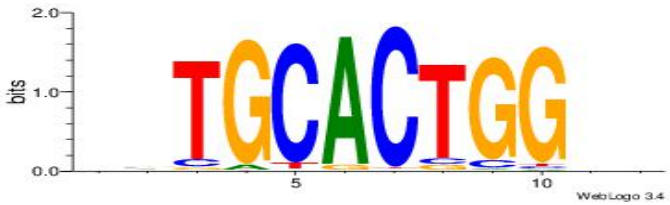
Dataset #: 4
Motif ID: 103
Motif name: ccCCAGTGCAbr
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 1
Number of overlap: 12
Similarity score: 0.0787476

Alignment:
DBTGCACTGGVD
BDGGCTSAGCBV

Original motif Consensus sequence: HVCCAGTGCABD

Reverse complement motif Consensus sequence: DBTGCACTGGVD



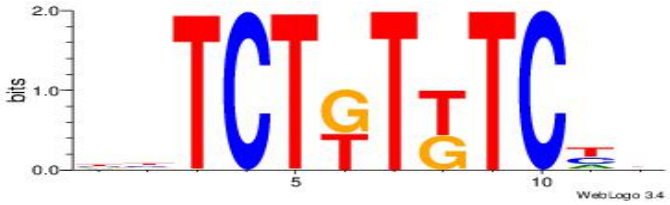


Dataset #:	4
Motif ID:	92
Motif name:	tyTCTkTkTCyy
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.0787512

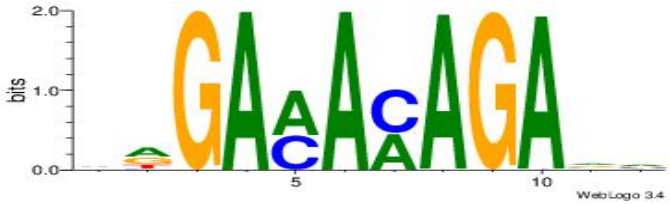
Alignment:

```
BBTCTKTKTCHB
VBGCTSAGCCHB
```

Original motif Consensus sequence: BBTCTKTKTCHB



Reverse complement motif Consensus sequence: VHGARAYAGAVV



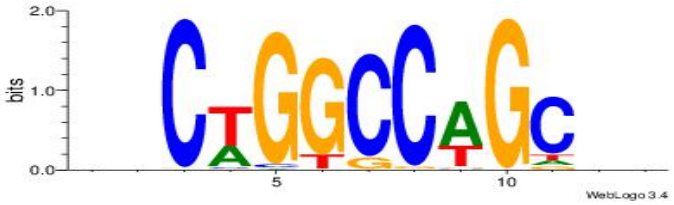
Dataset #:	4
Motif ID:	80

Motif name:	ssCwGGCCwGCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.0821079

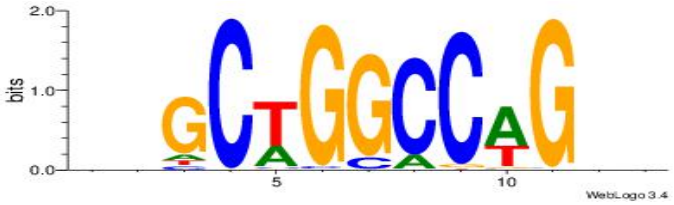
Alignment:

```
BBGCTGGCCWGBB
VBGCTSAGCCHB-
```

Original motif Consensus sequence: BBCWGGCCAGCBB



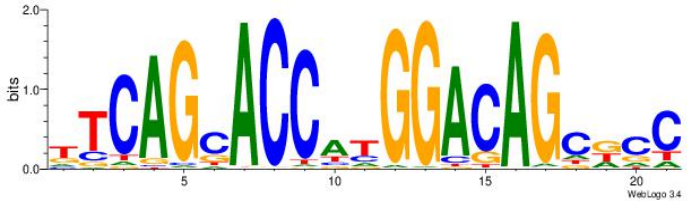
Reverse complement motif Consensus sequence: BBGCTGGCCWGBB



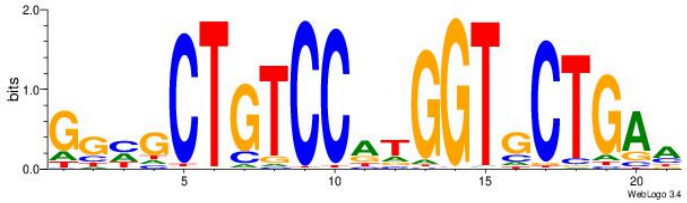
Dataset #:	3
Motif ID:	35
Motif name:	REST
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	9
Number of overlap:	12
Similarity score:	0.082174

Alignment:
TTCAGCACCATGGACAGCKCC
-BDGGCTSAGCBV--------

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC



Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA

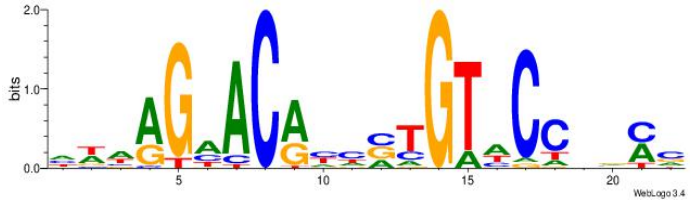


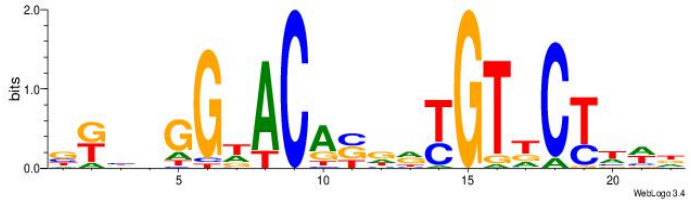
Dataset #:	3
Motif ID:	40
Motif name:	Ar
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	12
Similarity score:	0.0858473

Alignment:
VRVDGGHACAVDDKGTHCTDWH
--BDGGCTSAGCBV--------

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV

Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH

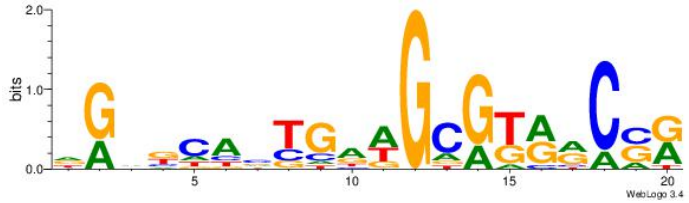




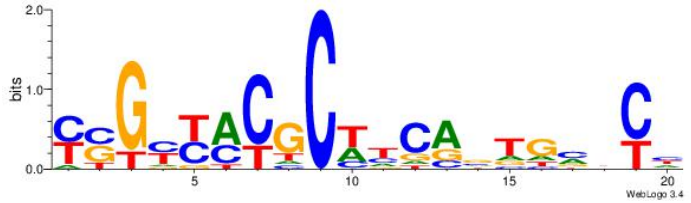
Dataset #: 3
Motif ID: 61
Motif name: Pax5
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 1
Number of overlap: 12
Similarity score: 0.08799

Alignment:
MSGKKRCGCWDCABTGBBCD
--------VBGCTSAGCCHB

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR



Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD



Dataset #: 3

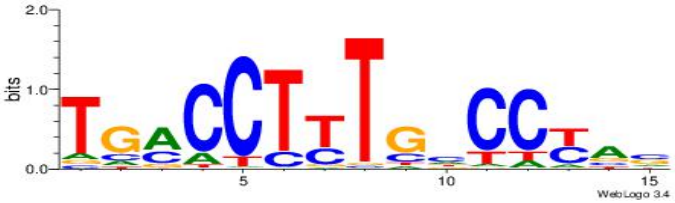
Motif ID:	36
Motif name:	PPARGRXRA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	12
Similarity score:	0.0909909

Alignment:

```
BTRGGDCARAGGKCA
-BDGGCTSAGCBV--
```

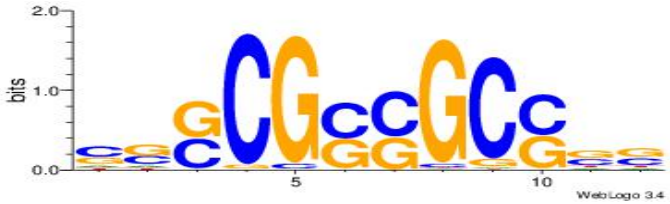
Original motif Consensus sequence: BTRGGDCARAGGKCA

Reverse complement motif Consensus sequence: TGRCCTKTGHCCK



Dataset #: 4 Motif ID: 78 Motif name: sssCGssGCsss

Original motif Consensus sequence: SSSCGSSGCSSS



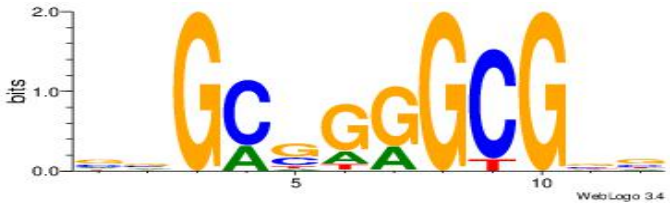
Reverse complement motif Consensus sequence: SSSGCSSCGSSS

Best Matches for Motif ID 78 (Highest to Lowest)

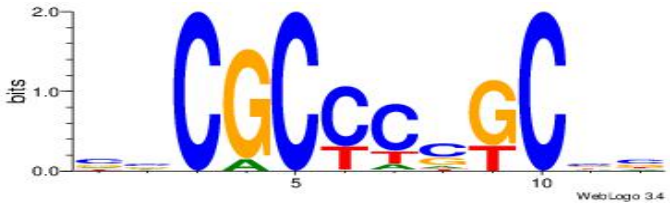
Dataset #:	4
Motif ID:	67
Motif name:	ssGMsGRGCGss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.0315939

Alignment:
BBCGCCCSGCVV
SSSGCSSCGSSS

Original motif Consensus sequence: VVGCSGGGCGBB



Reverse complement motif Consensus sequence: BBCGCCCSGCVV

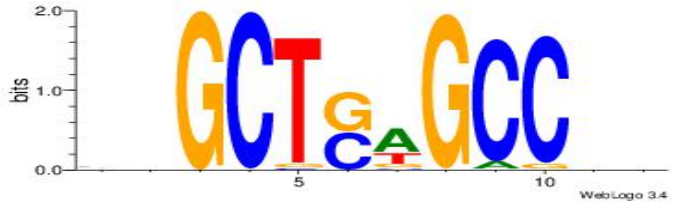


Dataset #:	4
Motif ID:	77
Motif name:	ssGCTswGCCms
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif

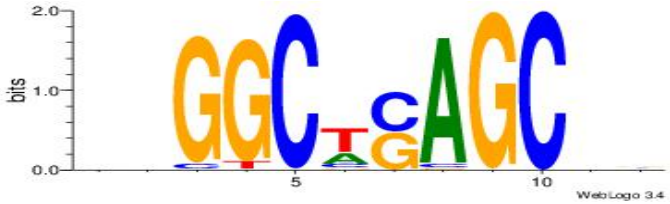
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.0377281

Alignment:
VBGCTSAGCCHB
SSSCGSSGCSSS

Original motif Consensus sequence: VBGCTSAGCCHB



Reverse complement motif Consensus sequence: BDGGCTSAGCBV

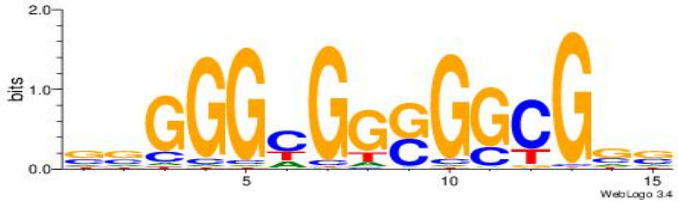


Dataset #:	4
Motif ID:	91
Motif name:	ssCGCCsCCrCCCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	12
Similarity score:	0.0388517

Alignment:
SSGGGCGGSGGCGSS
-SSSGCSSCGSSS--

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS

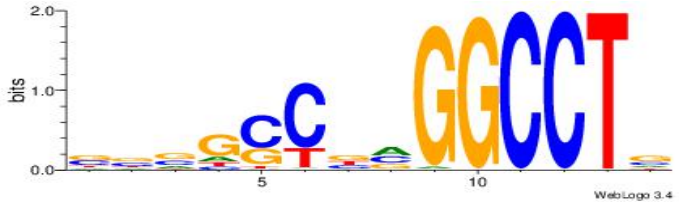


Dataset #:	3
Motif ID:	28
Motif name:	Zfx
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	12
Similarity score:	0.0423285

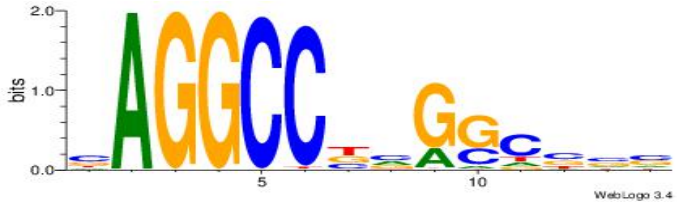
Alignment:

```
BBVGCCBVGGCCTV
--SSSCGSSGCSSS
```

Original motif Consensus sequence: BBVGCCBVGGCCTV



Reverse complement motif Consensus sequence: VAGGCCBBGGCVB



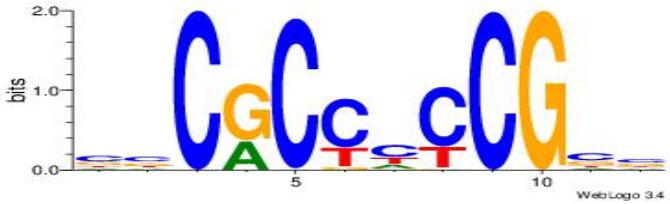
Dataset #:	4
Motif ID:	88
Motif name:	ssCrCYyYCGss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.0430105

Alignment:

BBCRCCYCCGBB

SSSGCSSCGSSS

Original motif Consensus sequence: BBCRCCYCCGBB



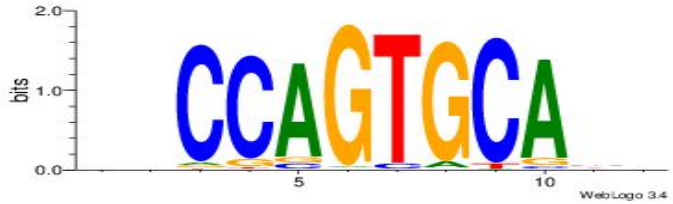
Reverse complement motif Consensus sequence: BBCGGKGGMGBB

Dataset #:	4
Motif ID:	103
Motif name:	ccCCAGTGCAbr
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	12

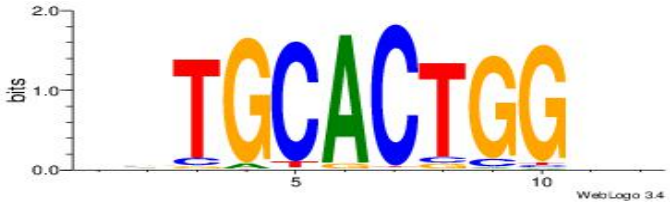
Similarity score: 0.0624096

Alignment:
HVCCAGTGCABD
SSSCGSSGCSSS

Original motif Consensus sequence: HVCCAGTGCABD



Reverse complement motif Consensus sequence: DBTGCACTGGVD

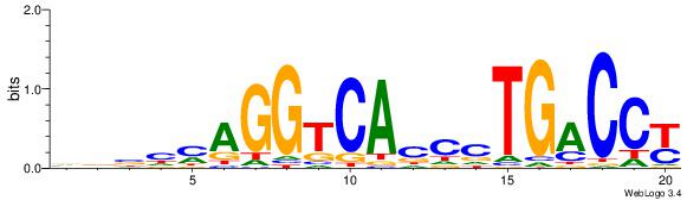


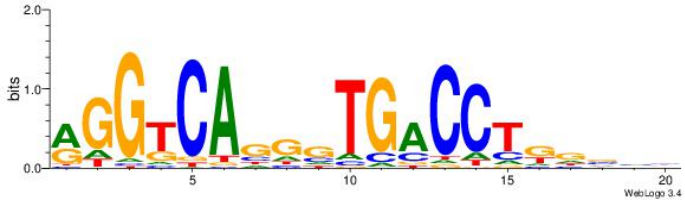
Dataset #: 3
Motif ID: 45
Motif name: ESR1
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 7
Number of overlap: 12
Similarity score: 0.0679556

Alignment:
MGGTCAGGGTGACCTRDBHV
--SSSCGSSGCSSS------

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY

Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV



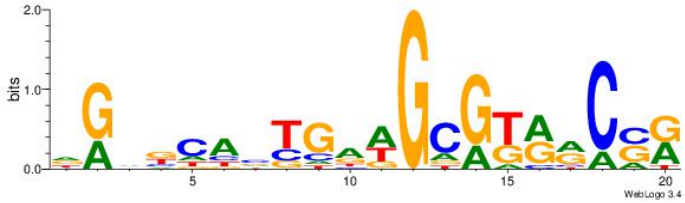


Dataset #:	3
Motif ID:	61
Motif name:	Pax5
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	12
Similarity score:	0.0682726

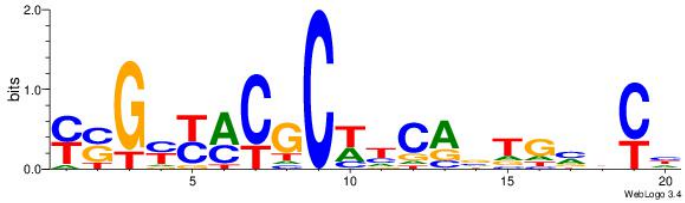
Alignment:

```
DGVBCABTGDWGCGKRRCSR
----SSSCGSSGCSSS----
```

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR



Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD



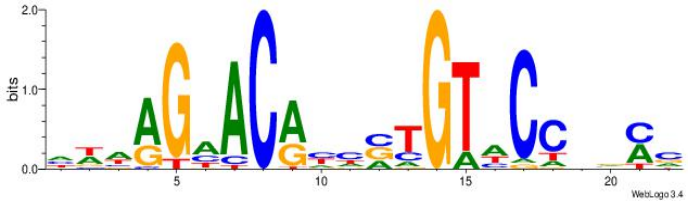
Dataset #:	3

Motif ID:	40
Motif name:	Ar
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	11
Number of overlap:	12
Similarity score:	0.0738808

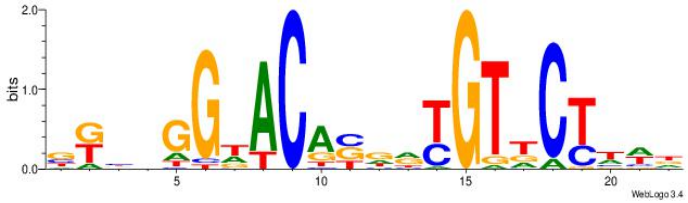
Alignment:

```
HWDAGHACRHHVTGTHCCHVMV
SSSGCSSCGSSS----------
```

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH

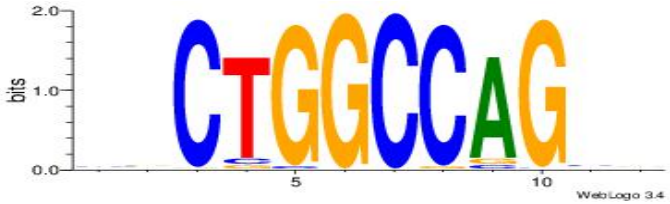


Dataset #:	4
Motif ID:	99
Motif name:	sgCTGGCCAGcs
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	12

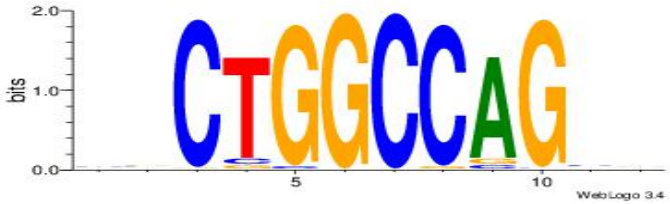
Similarity score: 0.0745276

Alignment:
BBCTGGCCAGVV
SSSCGSSGCSSS

Original motif Consensus sequence: BBCTGGCCAGVV

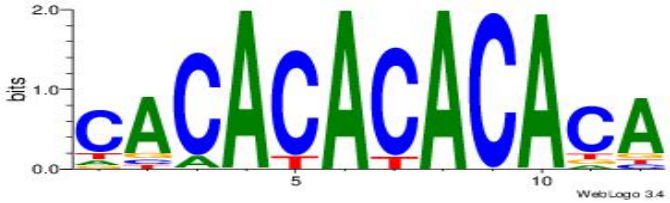


Reverse complement motif Consensus sequence: VVCTGGCCAGBB

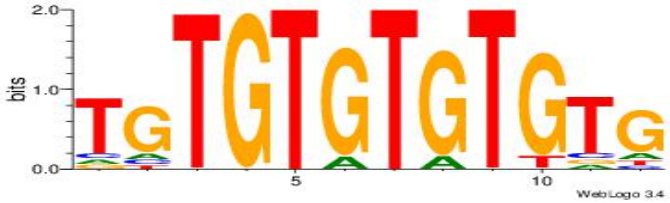


Dataset #: 4 Motif ID: 79 Motif name: CACACACACACA

Original motif Consensus sequence: CACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTG



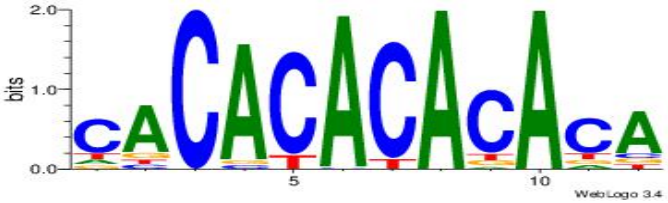
Best Matches for Motif ID 79 (Highest to Lowest)

Dataset #:	4
Motif ID:	95
Motif name:	CACACACACACA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward

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

Alignment:
CACACACACACA
CACACACACACA

Original motif Consensus sequence: CACACACACACA



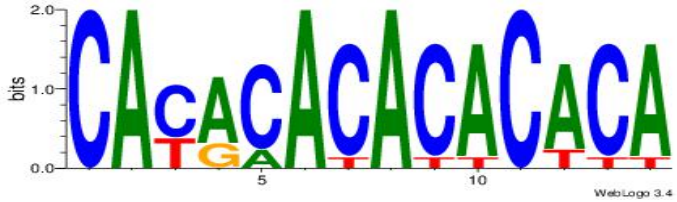
Reverse complement motif Consensus sequence: TGTGTGTGTGTG

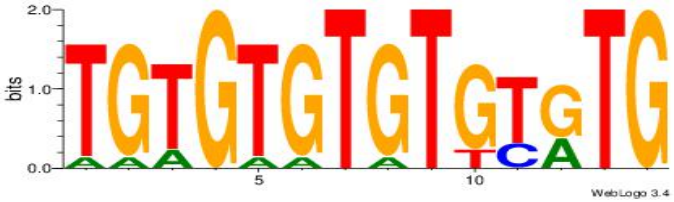
Dataset #: 2
Motif ID: 27
Motif name: Motif 27
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 3
Number of overlap: 12
Similarity score: 0.0113504

Alignment:
TGTGTGTGTGTKTG
TGTGTGTGTGTG--

Original motif Consensus sequence: CAYACACACACACA

Reverse complement motif Consensus sequence: TGTGTGTGTGTKT





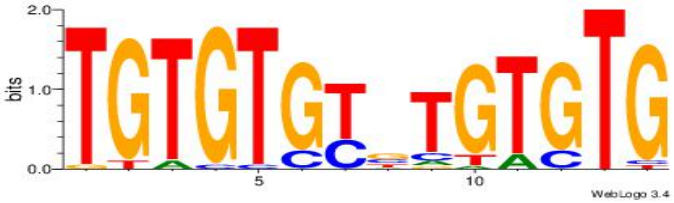
Dataset #:	2
Motif ID:	25
Motif name:	Motif 25
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	12
Similarity score:	0.0320014

Alignment:

```
CACACAVRCACACA
--CACACACACACA
```

Original motif Consensus sequence: CACACAVRCACACA

Reverse complement motif Consensus sequence: TGTGTGKVTGTGT



Dataset #:	4

Motif ID:	75
Motif name:	yayAyAyACATrya
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	12
Similarity score:	0.0651765

Alignment:

```
HACAYAYACATRHD
CACACACACACA--
```

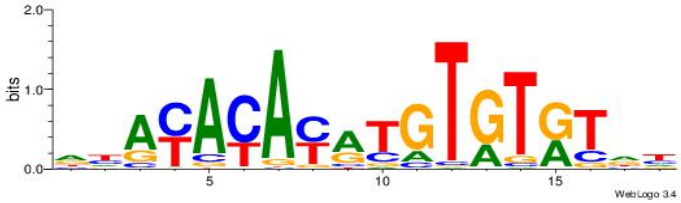
Original motif Consensus sequence: HACAYAYACATRHD

Reverse complement motif Consensus sequence: DHKATGTKTKTGT

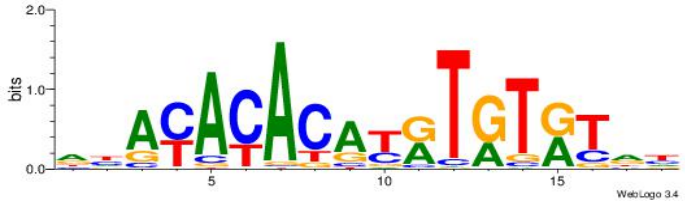
Dataset #:	4
Motif ID:	97
Motif name:	ryayAyAyrtGTRTrTry
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	12
Similarity score:	0.0845978

Alignment:
DHAYAYAYRTGTGTRTDH
-----TGTGTGTGTGTG-

Original motif Consensus sequence: DHAYAYAYRTGTGTRTDH



Reverse complement motif Consensus sequence: HDAMACACAKKTKTKTHD

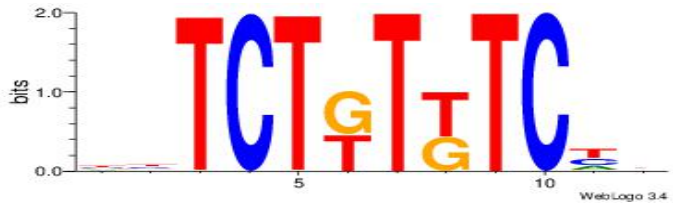


Dataset #:	4
Motif ID:	92
Motif name:	tyTCTkTkTCyy
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.0847238

Alignment:
BBTCTKTKTCHB
TGTGTGTGTGTG

Original motif Consensus sequence: BBTCTKTKTCHB

Reverse complement motif Consensus sequence: VHGARAYAGAVV

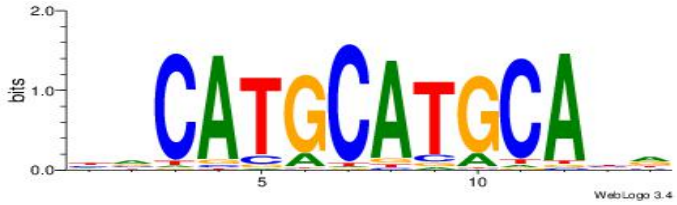


Dataset #:	4
Motif ID:	101
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.0887811

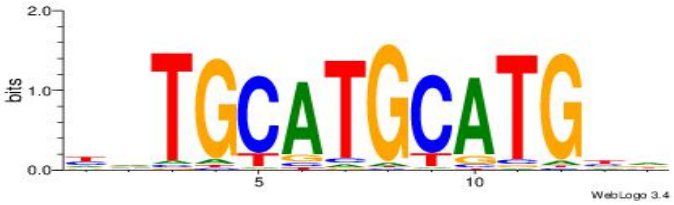
Alignment:

```
HVCATGCATGCABD
CACACACACACA--
```

Original motif Consensus sequence: HVCATGCATGCABD



Reverse complement motif Consensus sequence: DVTGCATGCATGB



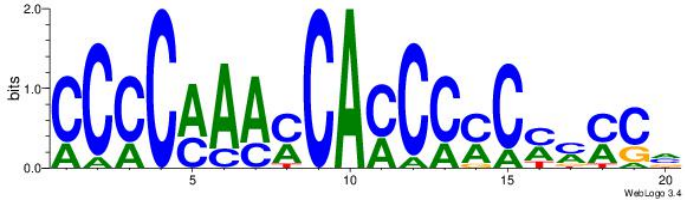
Dataset #:	3
Motif ID:	34

Motif name:	RREB1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	12
Similarity score:	0.0899886

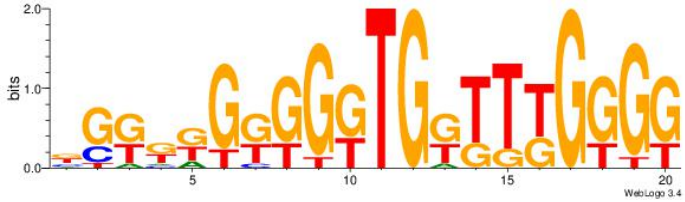
Alignment:

```
CCCCMAAMCAMCCMCMMMCV
----CACACACACACA----
```

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



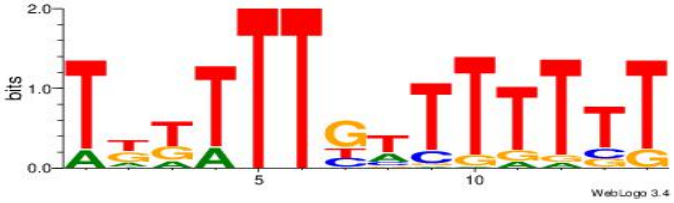
Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG



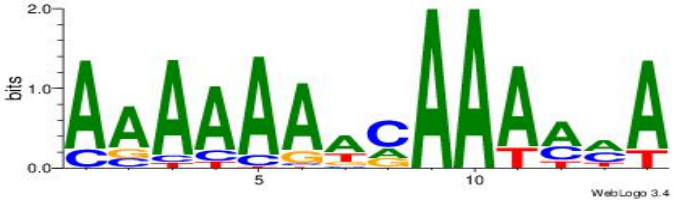
Dataset #:	2
Motif ID:	26
Motif name:	Motif 26
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	12
Similarity score:	0.100107

Alignment:
AAAAAAACAAARRA
-CACACACACACA-

Original motif Consensus sequence: TKKTTTGTTTTTTT



Reverse complement motif Consensus sequence: AAAAAAACAAARR

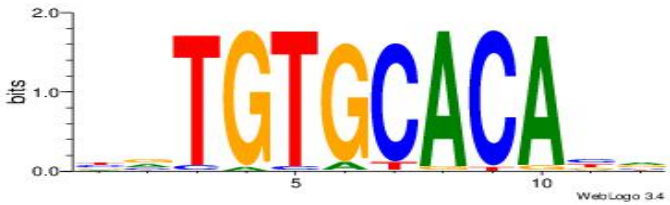


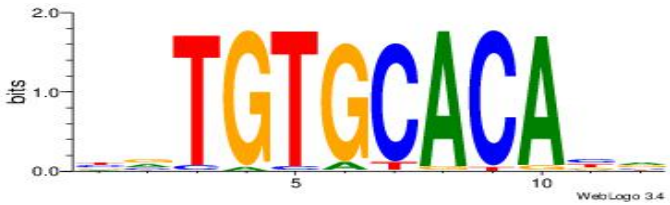
Dataset #:	4
Motif ID:	96
Motif name:	yrTGTGCACAyr
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.102069

Alignment:
BVTGTGCACABV
CACACACACACA

Original motif Consensus sequence: BVTGTGCACABV

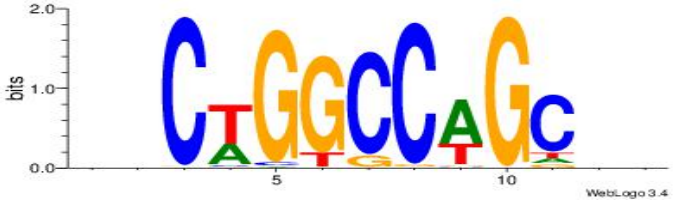
Reverse complement motif Consensus sequence: BBTGTGCACAVV



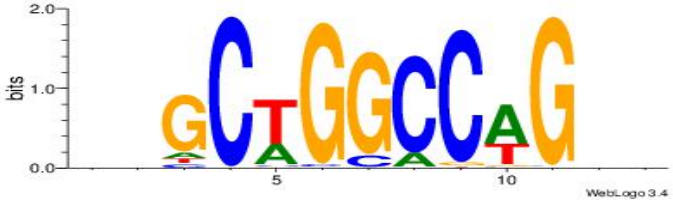


Dataset #: 4 **Motif ID: 80** **Motif name: ssCwGGCCwGCss**

Original motif Consensus sequence: BBCWGGCCAGCBB



Reverse complement motif Consensus sequence: BBGCTGGCCWGBB



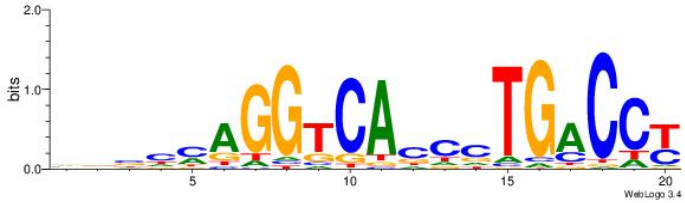
Best Matches for Motif ID 80 (Highest to Lowest)

Dataset #:	3
Motif ID:	45
Motif name:	ESR1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	13
Similarity score:	0.0567908

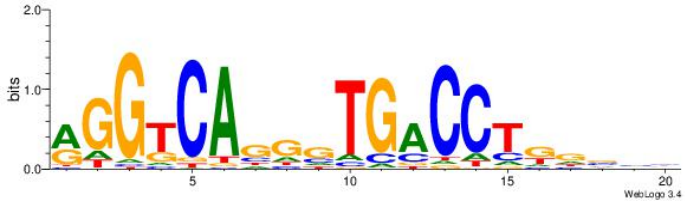
Alignment:

```
MGGTCAGGGTGACCTRDBHV
-----BBGCTGGCCWGBB--
```

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY



Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV

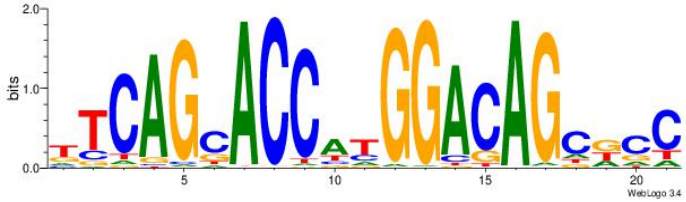


Dataset #:	3
Motif ID:	35
Motif name:	REST
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	13
Similarity score:	0.0602708

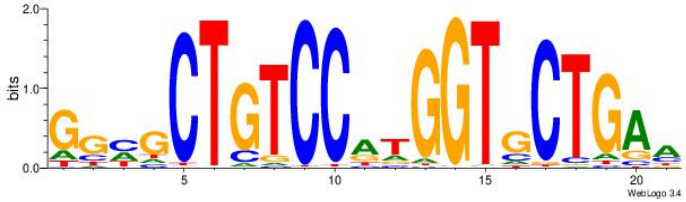
Alignment:

```
TTCAGCACCATGGACAGCKCC
-------BBCWGGCCAGCBB-
```

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC



Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA

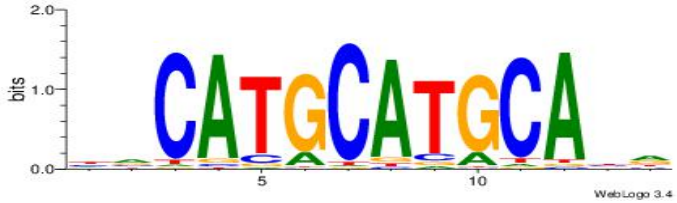


Dataset #:	4
Motif ID:	101
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	13
Similarity score:	0.0626373

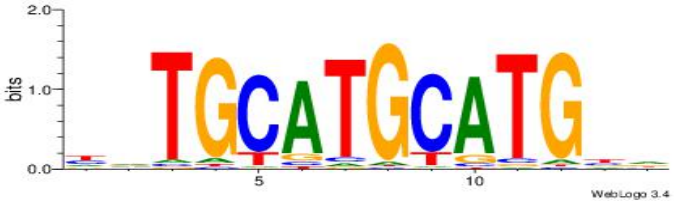
Alignment:

```
DVTGCATGCATGBH
-BBGCTGGCCWGBB
```

Original motif Consensus sequence: HVCATGCATGCABD



Reverse complement motif Consensus sequence: DVTGCATGCATGB

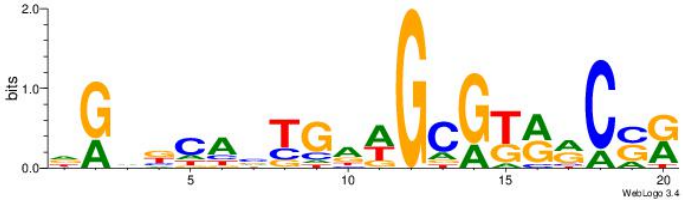


Dataset #:	3
Motif ID:	61
Motif name:	Pax5
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	13

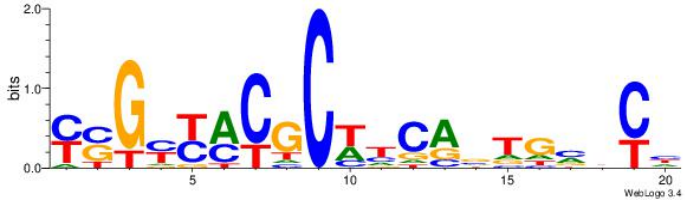
Similarity score: 0.0725196

Alignment:
MSGKKRCGCWDCABTGBBCD
-----BBGCTGGCCWGBB--

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR



Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD

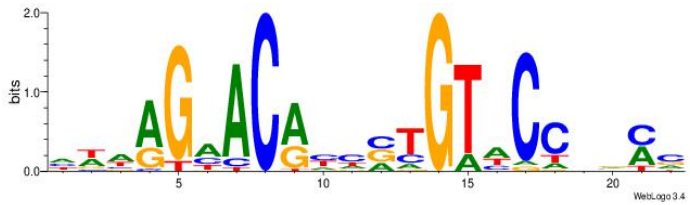


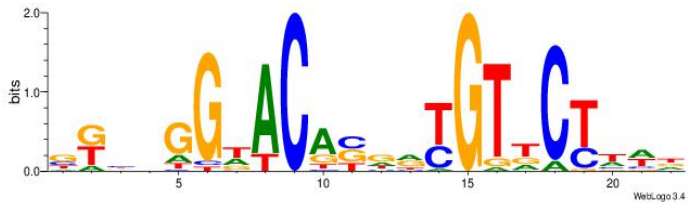
Dataset #: 3
Motif ID: 40
Motif name: Ar
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 10
Number of overlap: 13
Similarity score: 0.0752365

Alignment:
HWDAGHACRHHVTGTHCCHVMV
---------BBCWGGCCAGCBB

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV

Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH



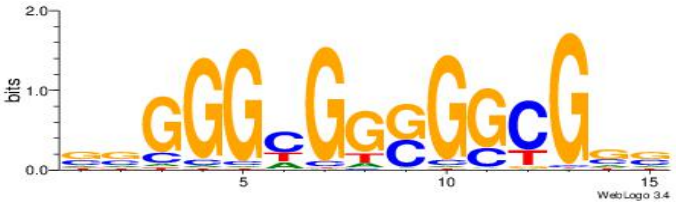


Dataset #: 4
Motif ID: 91
Motif name: ssCGCCsCCrCCCss
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 13
Similarity score: 0.0852017

Alignment:
SSGGGCGGSGGCGSS
--BBGCTGGCCWGBB

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS



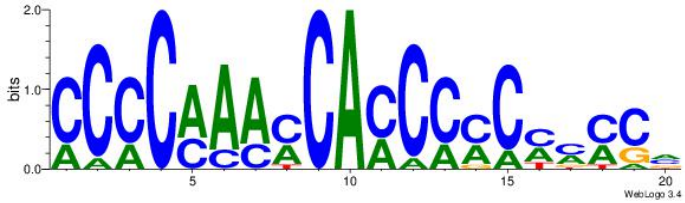
Dataset #: 3

Motif ID:	34
Motif name:	RREB1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	13
Similarity score:	0.0853399

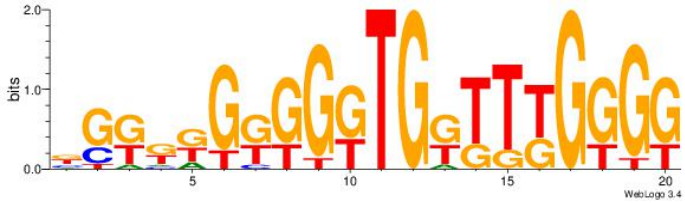
Alignment:

```
BGRRRGRGGRTGRTTYGGGG
------BBGCTGGCCWGBB-
```

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG

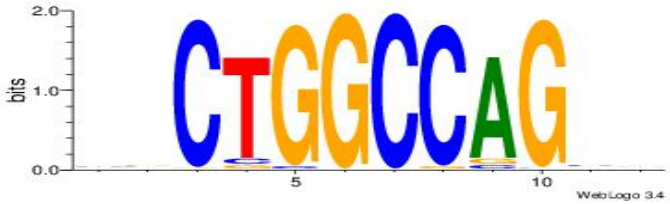


Dataset #:	4
Motif ID:	99
Motif name:	sgCTGGCCAGcs
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	12

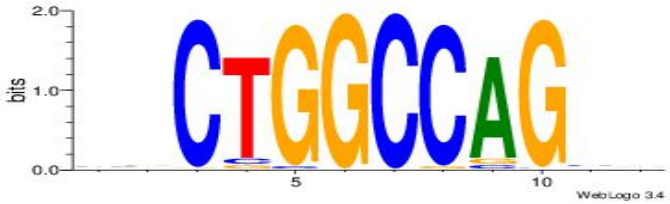
Similarity score: 0.5

Alignment:
BBCTGGCCAGVV-
BBCWGGCCAGCBB

Original motif Consensus sequence: BBCTGGCCAGVV



Reverse complement motif Consensus sequence: VVCTGGCCAGBB

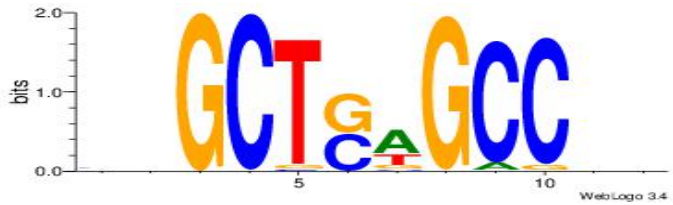


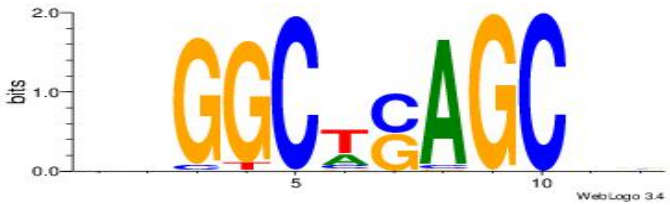
Dataset #: 4
Motif ID: 77
Motif name: ssGCTswGCCms
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 1
Number of overlap: 12
Similarity score: 0.567169

Alignment:
BDGGCTSAGCBV-
BBCWGGCCAGCBB

Original motif Consensus sequence: VBGCTSAGCCHB

Reverse complement motif Consensus sequence: BDGGCTSAGCBV



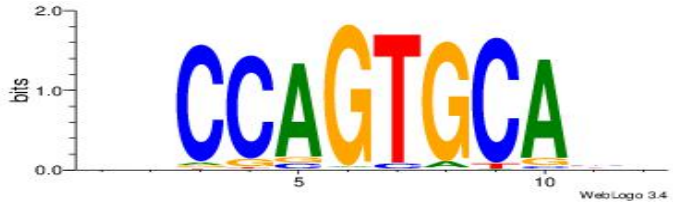


Dataset #:	4
Motif ID:	103
Motif name:	ccCCAGTGCAbr
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.56993

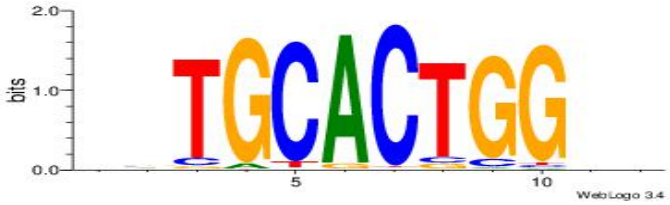
Alignment:

```
-DBTGCACTGGVD
BBCWGGCCAGCBB
```

Original motif Consensus sequence: HVCCAGTGCABD



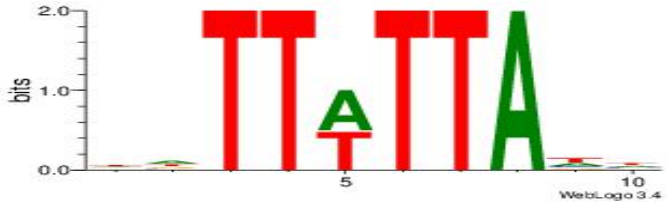
Reverse complement motif Consensus sequence: DBTGCACTGGVD



Dataset #: 4 Motif ID: 81 Motif name: wwTAAwAAww

Original motif Consensus sequence: DDTAAWAAHH

Reverse complement motif Consensus sequence: HHTTWTTADD



Best Matches for Motif ID 81 (Highest to Lowest)

Dataset #:	4
Motif ID:	83
Motif name:	wwTAAAwAww
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0

Alignment:

```
DDTAAAWAHH
DDTAAWAAHH
```

Original motif Consensus sequence: DDTAAAWAHH

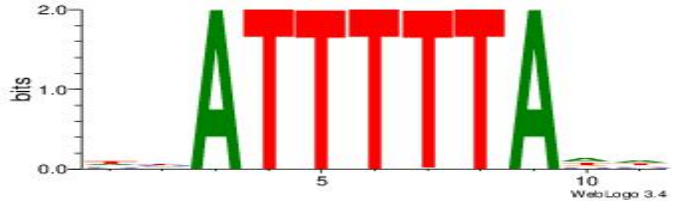
Reverse complement motif Consensus sequence: HHTWTTTADD

Dataset #:	4
Motif ID:	85
Motif name:	wtATTTTTAww
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.00383605

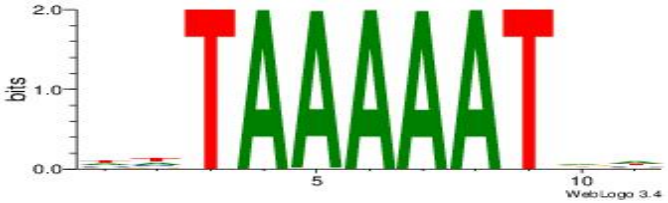
Alignment:

```
DHATTTTTADD
-HHTTWTTADD
```

Original motif Consensus sequence: DHATTTTTADD



Reverse complement motif Consensus sequence: DDTAAAAATHD



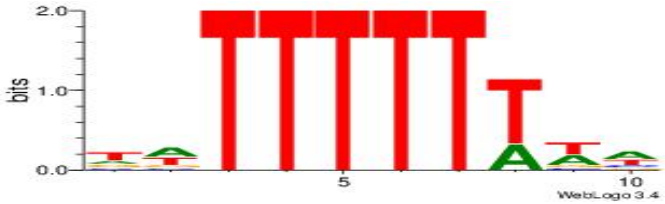
Dataset #:	4
Motif ID:	76
Motif name:	wwWAAAAAwa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10

Similarity score: 0.0119297

Alignment:
WWAAAAAAWH
DDTAAWAAHH

Original motif Consensus sequence: WWAAAAAAWH

Reverse complement motif Consensus sequence: HWTTTTTTWW



Dataset #: 4
Motif ID: 71
Motif name: wyATTTTAww
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: 0.0176574

Alignment:
DHATTTTADD
HHTTWTTADD

Original motif Consensus sequence: DHATTTTADD

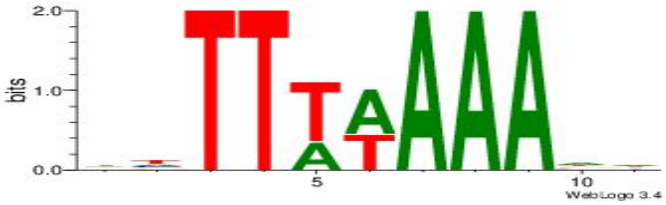
Reverse complement motif Consensus sequence: DDTAAAATHD

Dataset #:	4
Motif ID:	104
Motif name:	wtTTWwAAAaw
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0376356

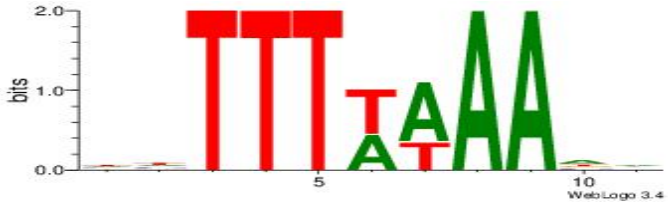
Alignment:

```
HHTTTWAAADD
-DDTAAWAAHH
```

Original motif Consensus sequence: HHTTTWAAADD



Reverse complement motif Consensus sequence: DDTTTWAAAHH



Dataset #:	4
Motif ID:	86

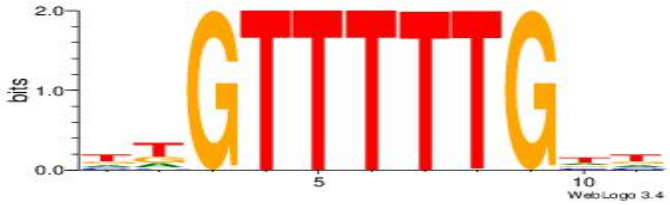
Motif name:	aaCAAAAACaa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0380114

Alignment:

```
HHCAAAAACAH
DDTAAWAAHH-
```

Original motif Consensus sequence: HHCAAAAACAH

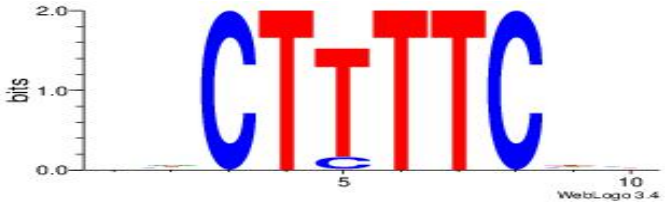
Reverse complement motif Consensus sequence: HTGTTTTTGHH



Dataset #:	4
Motif ID:	68
Motif name:	dwCTTTTCwy
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0422443

Alignment:
DHCTTTTCHH
HHTTWTTADD

Original motif Consensus sequence: DHCTTTTCHH



Reverse complement motif Consensus sequence: DHGAAAAGHD

Dataset #:	4
Motif ID:	74
Motif name:	twTACATAvw
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0437545

Alignment:
DBTATGTAHH
HHTTWTTADD

Original motif Consensus sequence: HHTACATAVD

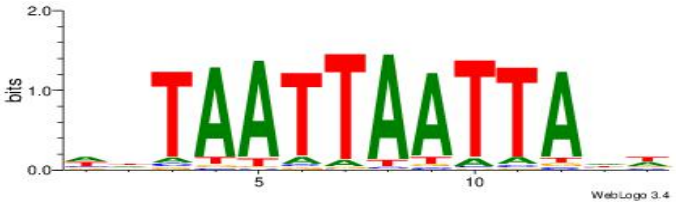
Reverse complement motif Consensus sequence: DBTATGTAHH

Dataset #:	4
Motif ID:	98
Motif name:	wwTAATTAATTAww
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	10
Similarity score:	0.0451418

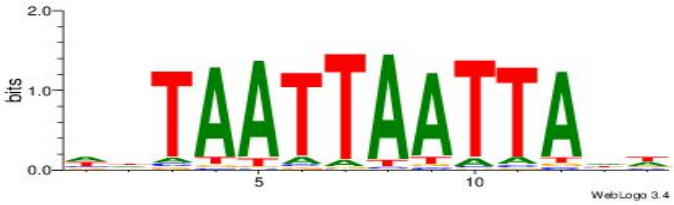
Alignment:

```
DHTAATTAATTADH
HHTTWTTADD----
```

Original motif Consensus sequence: HDTAATTAATTAHD



Reverse complement motif Consensus sequence: DHTAATTAATTADH



Dataset #:	4
Motif ID:	102

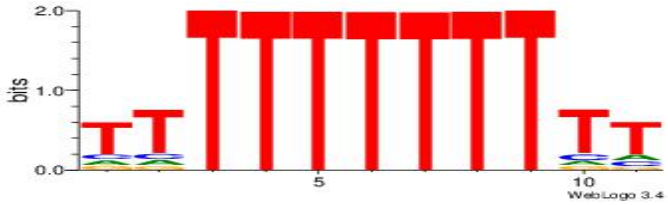
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0493427

Alignment:

```
TTTTTTTTTTT
-HHTTWTTADD
```

Original motif Consensus sequence: AAAAAAAAAAA

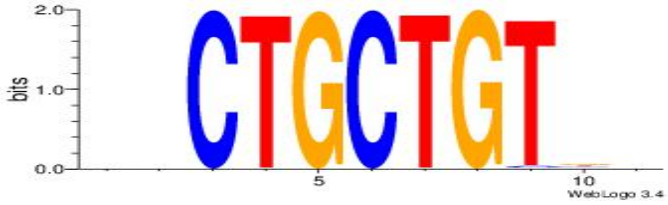
Reverse complement motif Consensus sequence: TTTTTTTTTTT



Dataset #: 4 Motif ID: 82 Motif name: rmACAGCAGsr

Original motif Consensus sequence: VVACAGCAGVD

Reverse complement motif Consensus sequence: DVCTGCTGTVB



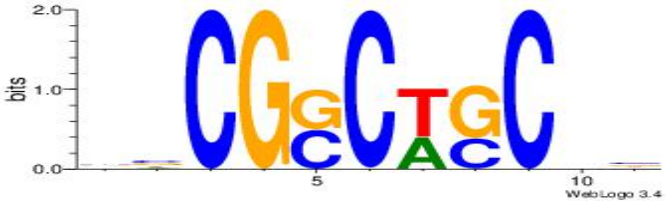
Best Matches for Motif ID 82 (Highest to Lowest)

Dataset #:	4
Motif ID:	90
Motif name:	ssCGsCwsCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0342871

Alignment:

```
BBGSWGSCGBB
VVACAGCAGVD
```

Original motif Consensus sequence: BBCGSCWSCBB



Reverse complement motif Consensus sequence: BBGSWGSCGBB

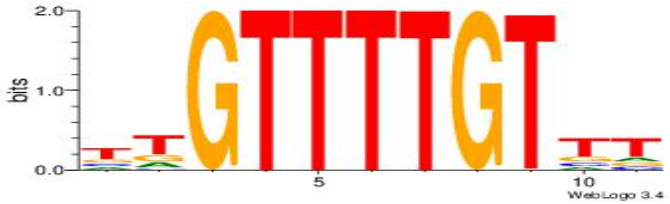
Dataset #:	4
Motif ID:	69
Motif name:	aaACAAAACaa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	11

Similarity score: 0.0446457

Alignment:
AAACAAAACAA
VVACAGCAGVD

Original motif Consensus sequence: AAACAAAACAA

Reverse complement motif Consensus sequence: TTGTTTTGTTT

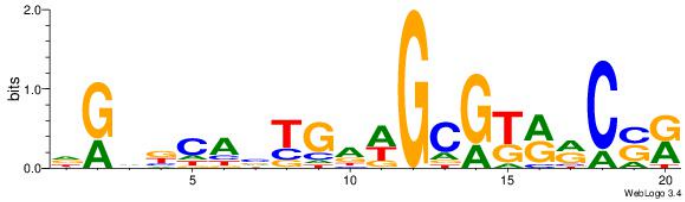


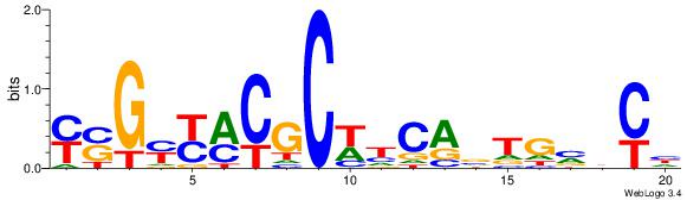
Dataset #:	3
Motif ID:	61
Motif name:	Pax5
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.0606795

Alignment:
MSGKKRCGCWDCABTGBBCD
------DVCTGCTGTVB---

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR

Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD



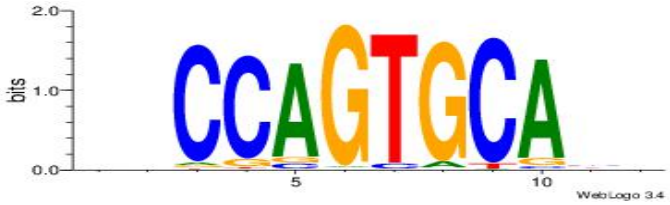


Dataset #:	4
Motif ID:	103
Motif name:	ccCCAGTGCAbr
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	11
Similarity score:	0.0611048

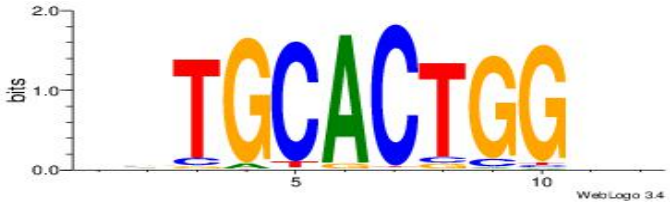
Alignment:

```
HVCCAGTGCABD
DVCTGCTGTVB-
```

Original motif Consensus sequence: HVCCAGTGCABD



Reverse complement motif Consensus sequence: DBTGCACTGGVD



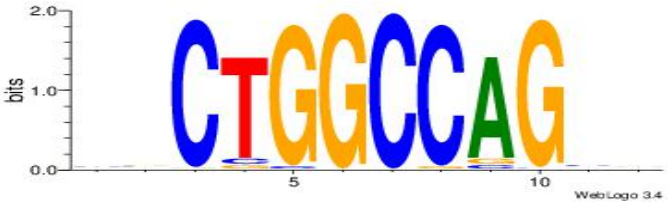
Dataset #:	4
Motif ID:	99

Motif name:	sgCTGGCCAGcs
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.0617776

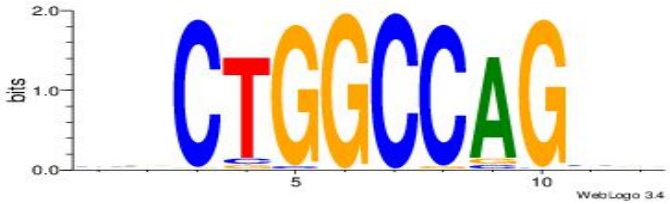
Alignment:

```
BBCTGGCCAGVV
-VVACAGCAGVD
```

Original motif Consensus sequence: BBCTGGCCAGVV



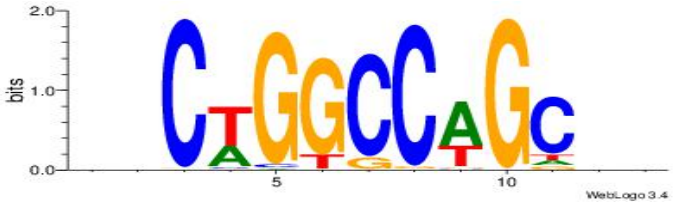
Reverse complement motif Consensus sequence: VVCTGGCCAGBB



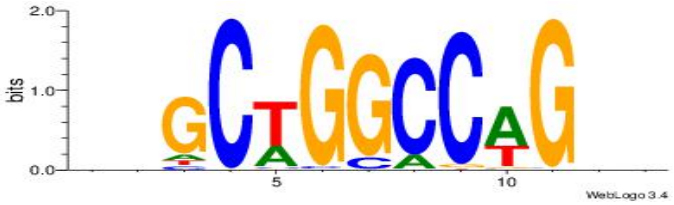
Dataset #:	4
Motif ID:	80
Motif name:	ssCwGGCCwGCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.0619045

Alignment:
BBGCTGGCCWGBB
-DVCTGCTGTVB-

Original motif Consensus sequence: BBCWGGCCAGCBB



Reverse complement motif Consensus sequence: BBGCTGGCCWGBB

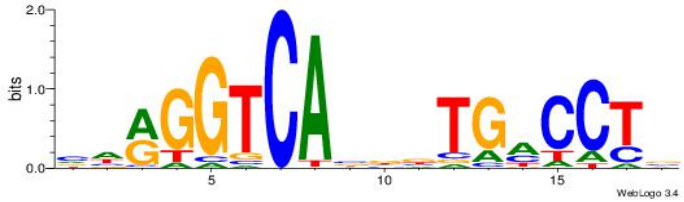


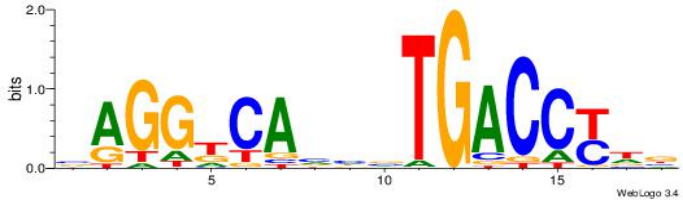
Dataset #:	3
Motif ID:	46
Motif name:	ESR2
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0619551

Alignment:
VHRGGTCABDBTGMCCTB
VVACAGCAGVD-------

Original motif Consensus sequence: VHRGGTCABDBTGMCCTB

Reverse complement motif Consensus sequence: BAGGYCABHBTGACCKHV



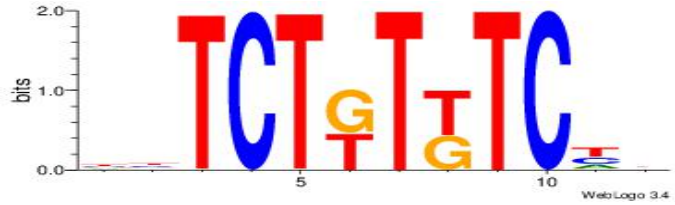


Dataset #:	4
Motif ID:	92
Motif name:	tyTCTkTkTCyy
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.064093

Alignment:

```
VHGARAYAGAVV
VVACAGCAGVD-
```

Original motif Consensus sequence: BBTCTKTKTCHB



Reverse complement motif Consensus sequence: VHGARAYAGAVV

Dataset #:	4
Motif ID:	87

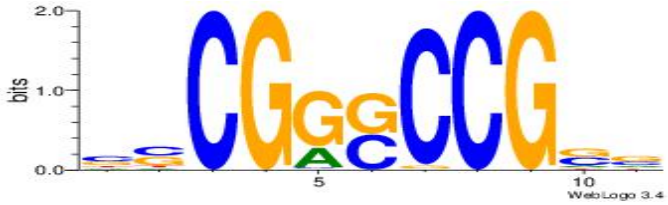
Motif name:	ssCGGsYCGss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0648198

Alignment:

```
BSCGGSCCGSV
DVCTGCTGTVB
```

Original motif Consensus sequence: BSCGGSCCGSV

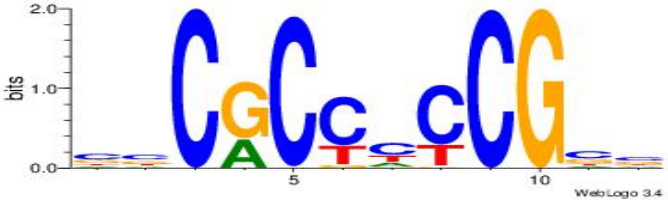
Reverse complement motif Consensus sequence: VSCGGSCCGSB



Dataset #:	4
Motif ID:	88
Motif name:	ssCrCYyYCGss
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:	0.0649769

Alignment:
BBCRCCYCCGBB
-VVACAGCAGVD

Original motif Consensus sequence: BBCRCCYCCGBB



Reverse complement motif Consensus sequence: BBCGGKGGMGBB

Dataset #: 4 Motif ID: 83 Motif name: wwTAAAwAww

Original motif Consensus sequence: DDTAAAWAHH

Reverse complement motif Consensus sequence: HHTWTTTADD

Best Matches for Motif ID 83 (Highest to Lowest)

Dataset #:	4
Motif ID:	81
Motif name:	wwTAAwAAww
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1

Number of overlap: 10
Similarity score: 0

Alignment:
DDTAAWAAHH
DDTAAAWAHH

Original motif Consensus sequence: DDTAAWAAHH

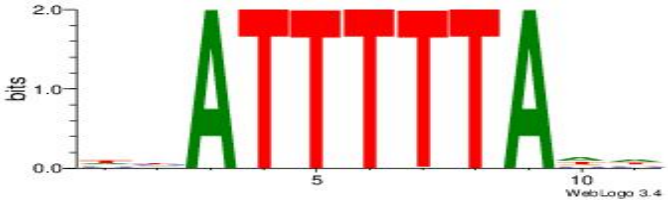
Reverse complement motif Consensus sequence: HHTTWTTADD

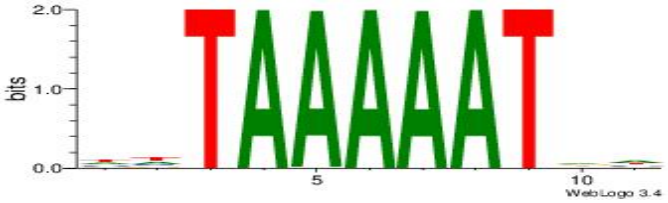
Dataset #: 4
Motif ID: 85
Motif name: wtATTTTTAww
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 1
Number of overlap: 10
Similarity score: 0.00769202

Alignment:
DHATTTTTADD
-HHTWTTTADD

Original motif Consensus sequence: DHATTTTTADD

Reverse complement motif Consensus sequence: DDTAAAAATHD





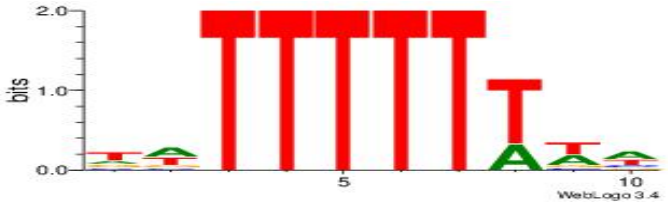
Dataset #:	4
Motif ID:	76
Motif name:	wwWAAAAAwa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0148593

Alignment:

```
WWAAAAAAWH
DDTAAAWAHH
```

Original motif Consensus sequence: WWAAAAAAWH

Reverse complement motif Consensus sequence: HWTTTTTTWW



Dataset #:	4
Motif ID:	74

Motif name:	twTACATAvw
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0155512

Alignment:

```
DBTATGTAHH
HHTWTTTADD
```

Original motif Consensus sequence: HHTACATAVD

Reverse complement motif Consensus sequence: DBTATGTAHH

Dataset #:	4
Motif ID:	71
Motif name:	wyATTTTAww
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:	0.0191754

Alignment:
DHATTTTADD
HHTWTTTADD

Original motif Consensus sequence: DHATTTTADD

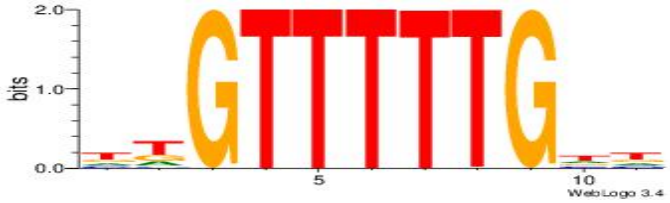
Reverse complement motif Consensus sequence: DDTAAAATHD

Dataset #:	4
Motif ID:	86
Motif name:	aaCAAAAACaa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0386588

Alignment:
HHCAAAAACAH
DDTAAAWAHH-

Original motif Consensus sequence: HHCAAAAACAH

Reverse complement motif Consensus sequence: HTGTTTTTGHH

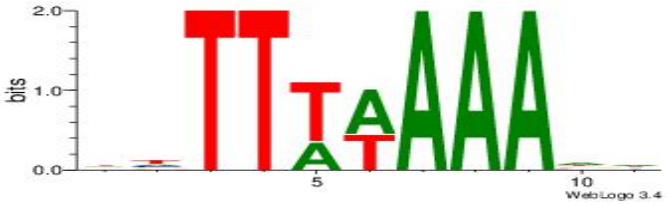


Dataset #:	4
Motif ID:	104
Motif name:	wtTTWwAAAaw
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	10
Similarity score:	0.0400542

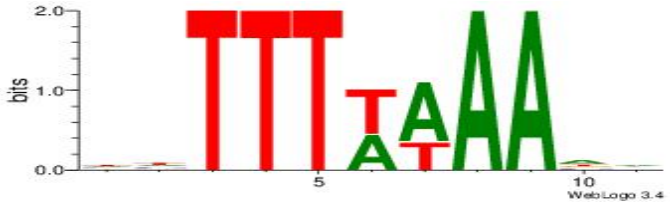
Alignment:

```
HHTTTWAAADD
-DDTAAAWAHH
```

Original motif Consensus sequence: HHTTTWAAADD



Reverse complement motif Consensus sequence: DDTTTWAAAHH



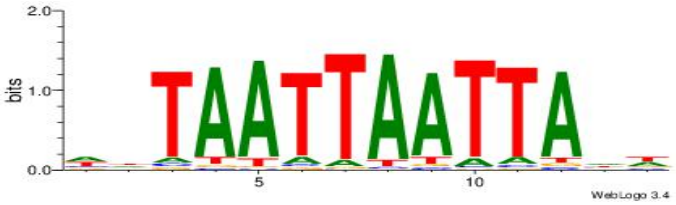
Dataset #:	4
Motif ID:	98

Motif name:	wwTAATTAATTAww
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	10
Similarity score:	0.0425216

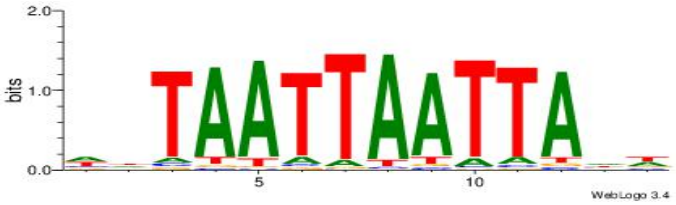
Alignment:

```
DHTAATTAATTADH
HHTWTTTADD----
```

Original motif Consensus sequence: HDTAATTAATTAHD



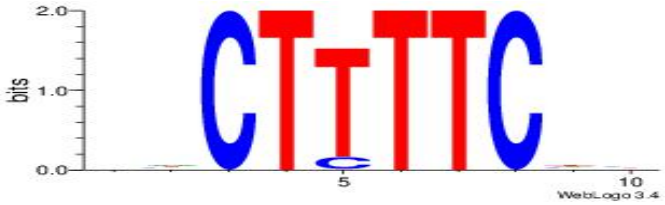
Reverse complement motif Consensus sequence: DHTAATTAATTADH



Dataset #:	4
Motif ID:	68
Motif name:	dwCTTTTCwy
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0470869

Alignment:
DHCTTTTCHH
HHTWTTTADD

Original motif Consensus sequence: DHCTTTTCHH



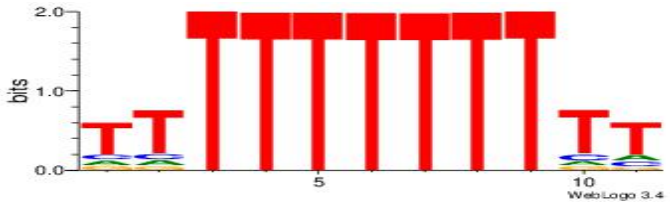
Reverse complement motif Consensus sequence: DHGAAAAGHD

Dataset #:	4
Motif ID:	102
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0497246

Alignment:
TTTTTTTTTTT
-HHTWTTTADD

Original motif Consensus sequence: AAAAAAAAAAA

Reverse complement motif Consensus sequence: TTTTTTTTTT



Dataset #: 4 **Motif ID: 84** **Motif name: wsAGCTACwy**

Original motif Consensus sequence: DVAGCTACHB

Reverse complement motif Consensus sequence: VHGTAGCTVD

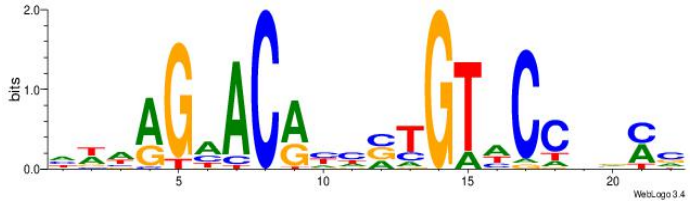
Best Matches for Motif ID 84 (Highest to Lowest)

Dataset #:	3
Motif ID:	40
Motif name:	Ar
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	12
Number of overlap:	10
Similarity score:	0.0406295

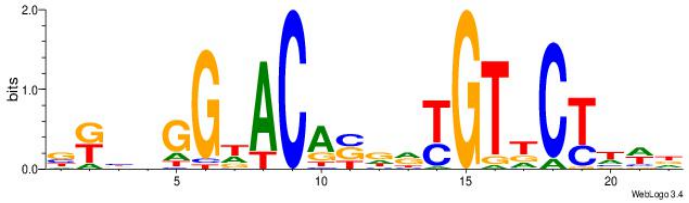
Alignment:

```
HWDAGHACRHHVTGTHCCHVMV
-VHGTAGCTVD-----------
```

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH

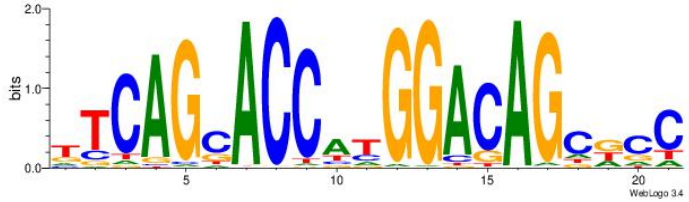


Dataset #:	3
Motif ID:	35
Motif name:	REST
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0488771

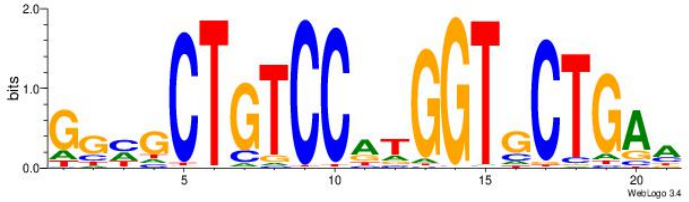
Alignment:

```
GGYGCTGTCCATGGTGCTGAA
----------VHGTAGCTVD-
```

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC



Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA

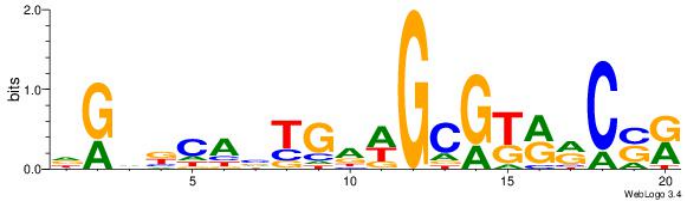


Dataset #:	3
Motif ID:	61
Motif name:	Pax5
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	10
Similarity score:	0.0490165

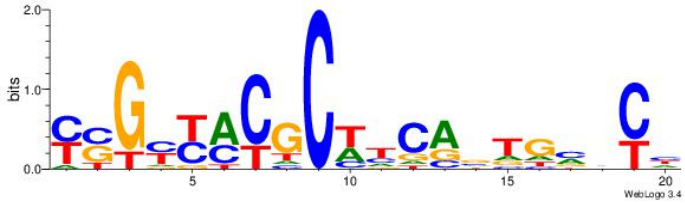
Alignment:

```
DGVBCABTGDWGCGKRRCSR
----VHGTAGCTVD------
```

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR



Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD

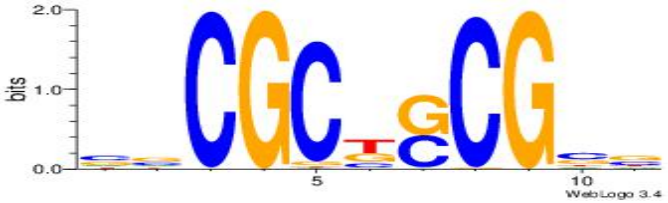


Dataset #:	4
Motif ID:	94
Motif name:	ssCGCksCGss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2

Number of overlap: 10
Similarity score: 0.0498691

Alignment:
BBCGSRGCGVV
-VHGTAGCTVD

Original motif Consensus sequence: VVCGCKSCGBB



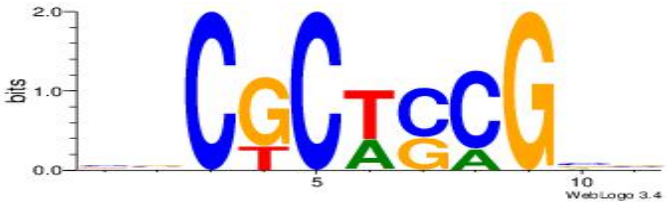
Reverse complement motif Consensus sequence: BBCGSRGCGVV

Dataset #: 4
Motif ID: 72
Motif name: ssCKCwsCGss
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 1
Number of overlap: 10
Similarity score: 0.0504682

Alignment:
VBCGSWGCGVB
-VHGTAGCTVD

Original motif Consensus sequence: BVCGCWSCGBV

Reverse complement motif Consensus sequence: VBCGSWGCGVB



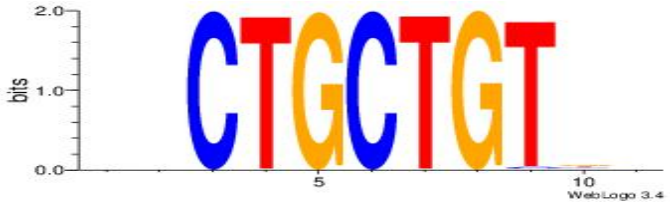
Dataset #:	4
Motif ID:	82
Motif name:	rmACAGCAGsr
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0522604

Alignment:

```
DVCTGCTGTVB
DVAGCTACHB-
```

Original motif Consensus sequence: VVACAGCAGVD

Reverse complement motif Consensus sequence: DVCTGCTGTVB



Dataset #:	4
Motif ID:	86

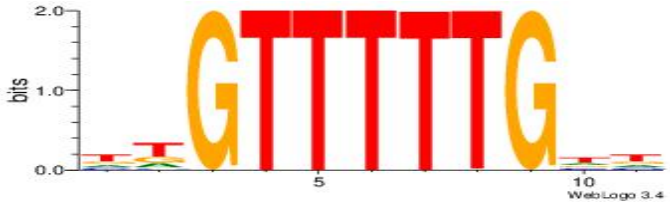
Motif name:	aaCAAAAACaa
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0552268

Alignment:

```
HTGTTTTTGHH
VHGTAGCTVD-
```

Original motif Consensus sequence: HHCAAAAACAH

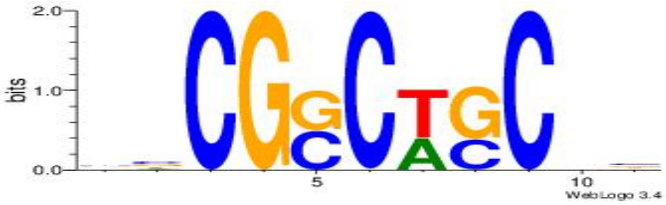
Reverse complement motif Consensus sequence: HTGTTTTTGHH



Dataset #:	4
Motif ID:	90
Motif name:	ssCGsCwsCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0555094

Alignment:
BBGSWGSCGBB
VHGTAGCTVD-

Original motif Consensus sequence: BBCGSCWSCBB



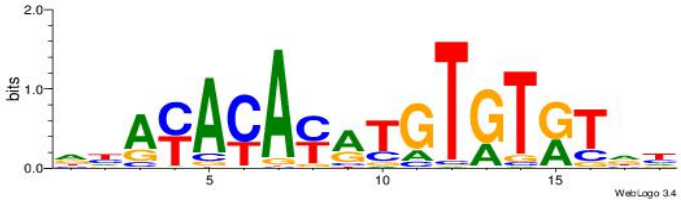
Reverse complement motif Consensus sequence: BBGSWGSCGBB

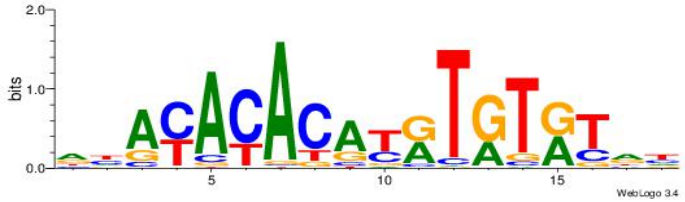
Dataset #:	4
Motif ID:	97
Motif name:	ryayAyAyrtGTRTrTry
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	9
Number of overlap:	10
Similarity score:	0.0576734

Alignment:
DHAYAYAYRTGTGTRTDH
--------VHGTAGCTVD

Original motif Consensus sequence: DHAYAYAYRTGTGTRTDH

Reverse complement motif Consensus sequence: HDAMACACAKKTKTKTHD



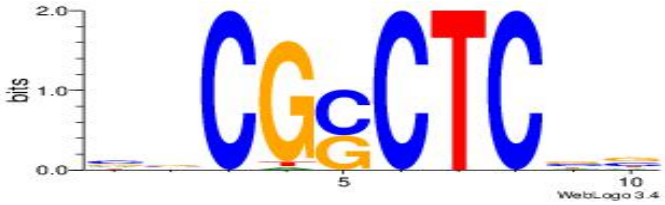


Dataset #:	4
Motif ID:	73
Motif name:	ssCGsCTCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0593588

Alignment:

```
BBGAGSCGVV
VHGTAGCTVD
```

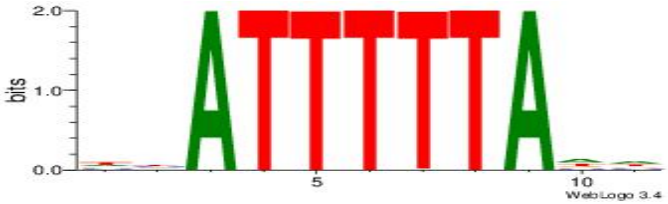
Original motif Consensus sequence: VVCGSCTCBB



Reverse complement motif Consensus sequence: BBGAGSCGVV

Dataset #: 4 Motif ID: 85 Motif name: wtATTTTTAww

Original motif Consensus sequence: DHATTTTTADD



Reverse complement motif Consensus sequence: DDTAAAAATHD

Best Matches for Motif ID 85 (Highest to Lowest)

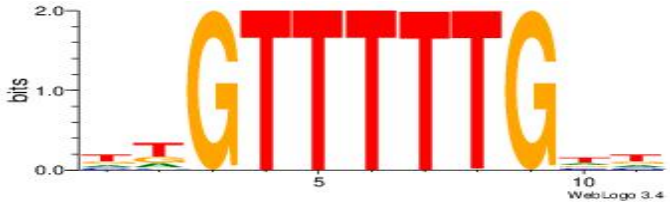
Dataset #:	4
Motif ID:	86
Motif name:	aaCAAAAACaa
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.0261531

Alignment:

```
HHCAAAAACAH
DDTAAAAATHD
```

Original motif Consensus sequence: HHCAAAAACAH

Reverse complement motif Consensus sequence: HTGTTTTTGHH

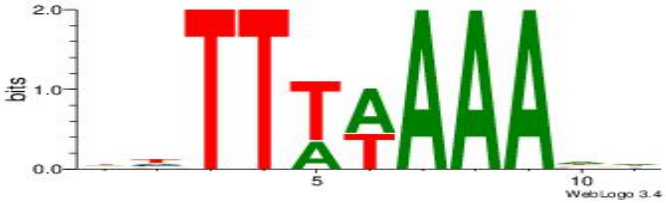


Dataset #:	4
Motif ID:	104
Motif name:	wtTTWwAAAaw
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.0418871

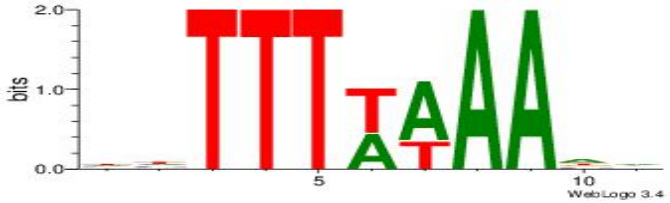
Alignment:

```
HHTTTWAAADD
DDTAAAAATHD
```

Original motif Consensus sequence: HHTTTWAAADD



Reverse complement motif Consensus sequence: DDTTTWAAAHH



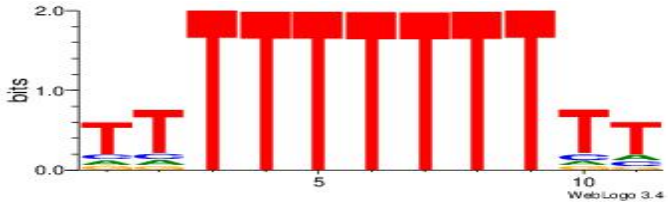
Dataset #:	4
Motif ID:	102
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	11

Similarity score: 0.0435465

Alignment:
TTTTTTTTTTT
DHATTTTTADD

Original motif Consensus sequence: AAAAAAAAAAA

Reverse complement motif Consensus sequence: TTTTTTTTTTT

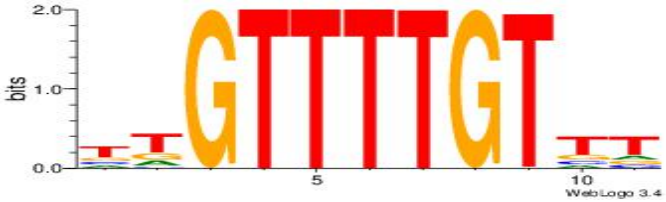


Dataset #: 4
Motif ID: 69
Motif name: aaACAAAACaa
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 11
Similarity score: 0.0554976

Alignment:
AAACAAAACAA
DDTAAAAATHD

Original motif Consensus sequence: AAACAAAACAA

Reverse complement motif Consensus sequence: TTGTTTTGTTT

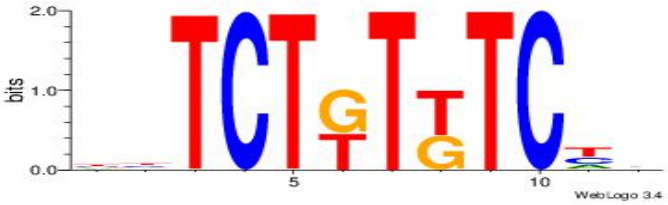


Dataset #:	4
Motif ID:	92
Motif name:	tyTCTkTkTCyy
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.0619608

Alignment:

```
BBTCTKTKTCHB
-DHATTTTTADD
```

Original motif Consensus sequence: BBTCTKTKTCHB



Reverse complement motif Consensus sequence: VHGARAYAGAVV

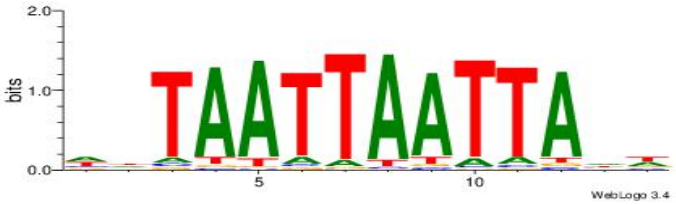
Dataset #:	4
Motif ID:	98

Motif name:	wwTAATTAATTAww
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:	0.071067

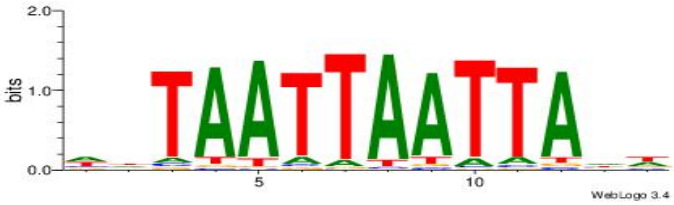
Alignment:

```
HDTAATTAATTAHD
DDTAAAAATHD---
```

Original motif Consensus sequence: HDTAATTAATTAHD



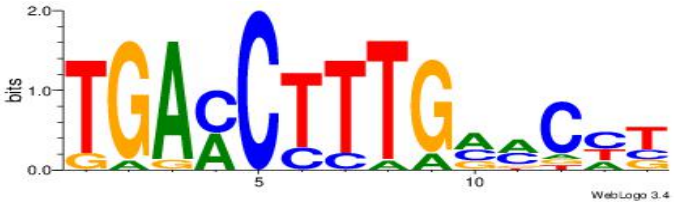
Reverse complement motif Consensus sequence: DHTAATTAATTADH



Dataset #:	3
Motif ID:	38
Motif name:	NR2F1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.073779

Alignment:
AKGYYCAAAGRTCA
---DDTAAAAATHD

Original motif Consensus sequence: TGAMCTTTGMMCYT



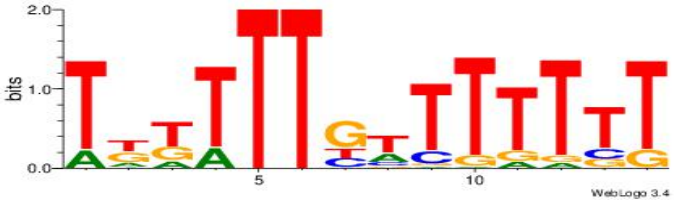
Reverse complement motif Consensus sequence: AKGYYCAAAGRTCA

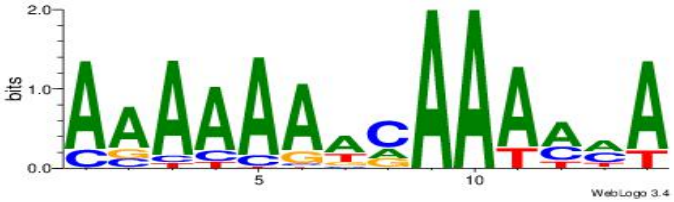
Dataset #:	2
Motif ID:	26
Motif name:	Motif 26
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.0743375

Alignment:
TKKTTTGTTTTTTT
-DHATTTTTADD--

Original motif Consensus sequence: TKKTTTGTTTTTTT

Reverse complement motif Consensus sequence: AAAAAAACAAARR



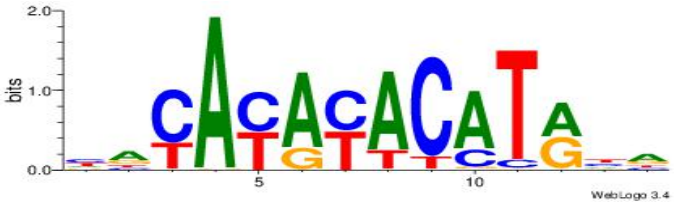


Dataset #:	4
Motif ID:	75
Motif name:	yayAyAyACATrya
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	11
Similarity score:	0.0781372

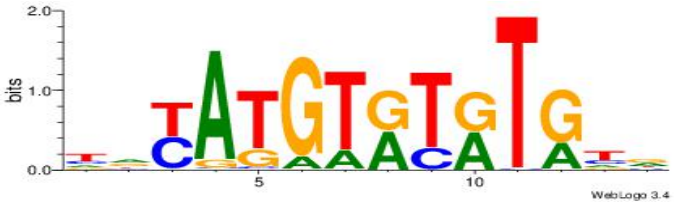
Alignment:

```
HACAYAYACATRHD
---DDTAAAAATHD
```

Original motif Consensus sequence: HACAYAYACATRHD



Reverse complement motif Consensus sequence: DHKATGTKTKTGT



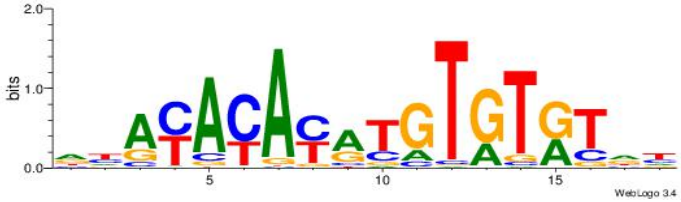
Dataset #:	4
Motif ID:	97

Motif name:	ryayAyAyrtGTRTrTry
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	11
Similarity score:	0.078844

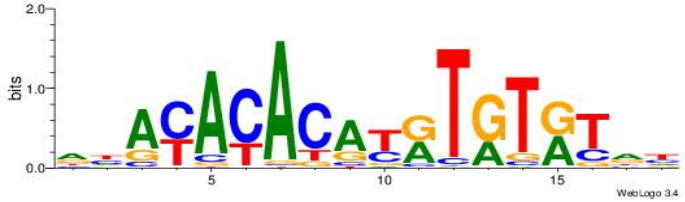
Alignment:

```
HDAMACACAKKTKTKTHD
------DHATTTTTADD-
```

Original motif Consensus sequence: DHAYAYAYRTGTGTRTDH

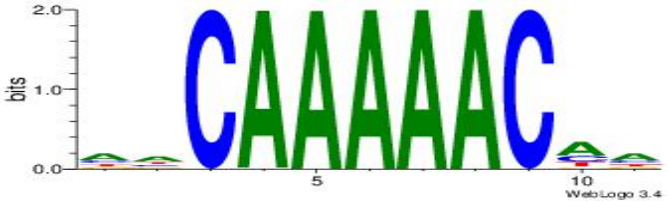


Reverse complement motif Consensus sequence: HDAMACACAKKTKTKTHD

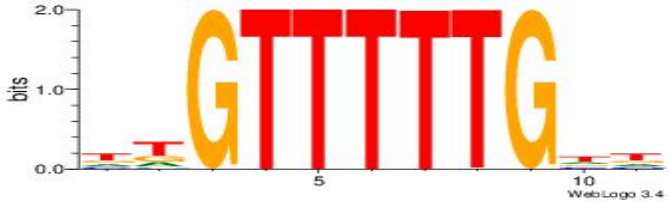


Dataset #: 4 Motif ID: 86 Motif name: aaCAAAAACaa

Original motif Consensus sequence: HHCAAAAACAH



Reverse complement motif Consensus sequence: HTGTTTTTGHH



Best Matches for Motif ID 86 (Highest to Lowest)

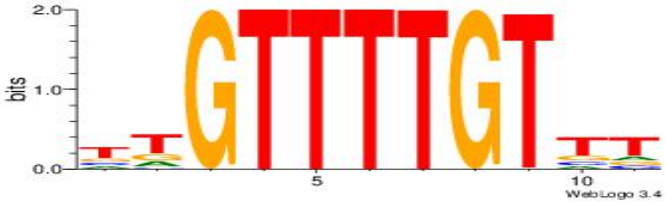
Dataset #:	4
Motif ID:	69
Motif name:	aaACAAAACaa
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.00599723

Alignment:

```
TTGTTTTGTTT
HTGTTTTTGHH
```

Original motif Consensus sequence: AAACAAAACAA

Reverse complement motif Consensus sequence: TTGTTTTGTTT

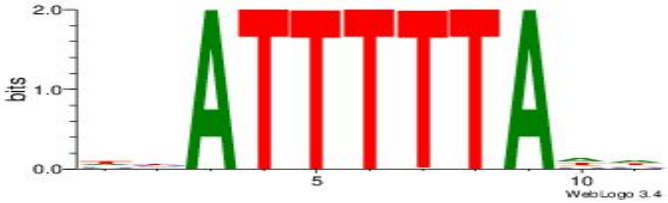


Dataset #:	4
Motif ID:	85
Motif name:	wtATTTTTAww
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement

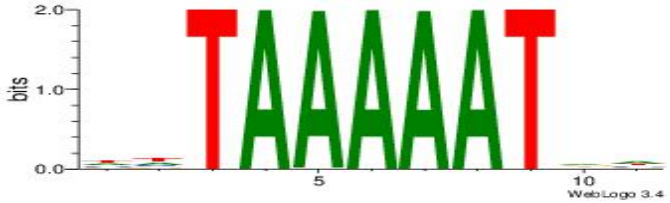
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0144021

Alignment:
DDTAAAAATHD
HHCAAAAACAH

Original motif Consensus sequence: DHATTTTTADD



Reverse complement motif Consensus sequence: DDTAAAAATHD

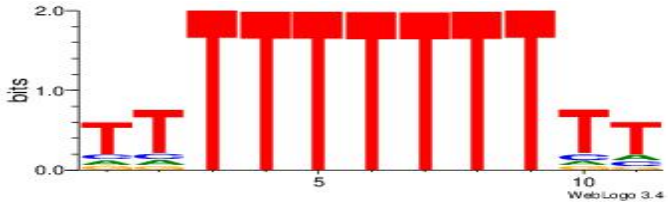


Dataset #:	4
Motif ID:	102
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.0192906

Alignment:
TTTTTTTTTTT
HTGTTTTTGHH

Original motif Consensus sequence: AAAAAAAAAAA

Reverse complement motif Consensus sequence: TTTTTTTTTTT



Dataset #:	4
Motif ID:	75
Motif name:	yayAyAyACATrya
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	11
Similarity score:	0.0258087

Alignment:

```
DHKATGTKTKTGTD
---HTGTTTTTGHH
```

Original motif Consensus sequence: HACAYAYACATRHD

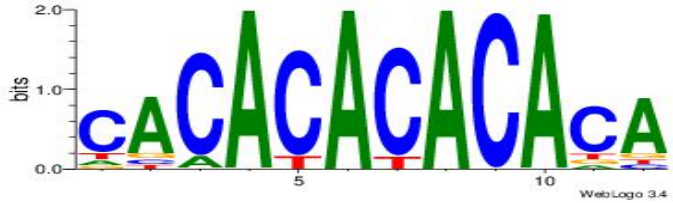
Reverse complement motif Consensus sequence: DHKATGTKTKTGT

Dataset #:	4
Motif ID:	79
Motif name:	CACACACACACA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.0409728

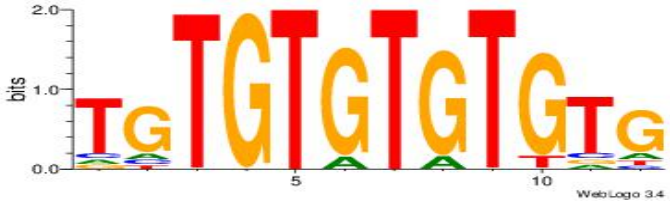
Alignment:

```
TGTGTGTGTGTG
-HTGTTTTTGHH
```

Original motif Consensus sequence: CACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTG

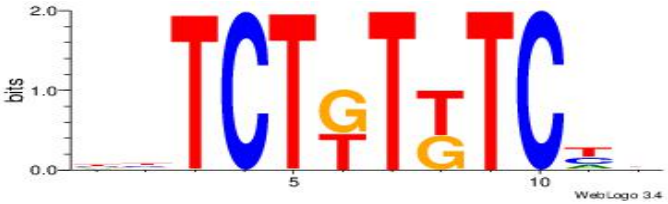


Dataset #:	4
Motif ID:	92
Motif name:	tyTCTkTkTCyy
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	11

Similarity score: 0.0416867

Alignment:
BBTCTKTKTCHB
-HTGTTTTTGHH

Original motif Consensus sequence: BBTCTKTKTCHB



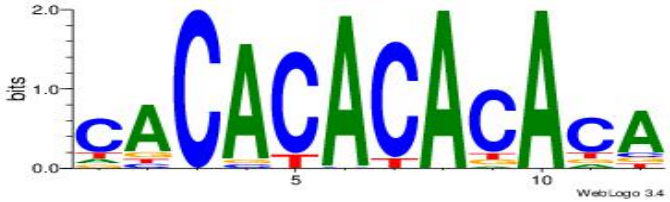
Reverse complement motif Consensus sequence: VHGARAYAGAVV

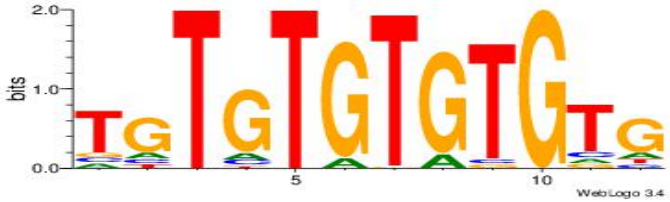
Dataset #:	4
Motif ID:	95
Motif name:	CACACACACACA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.0421933

Alignment:
TGTGTGTGTGTG
-HTGTTTTTGHH

Original motif Consensus sequence: CACACACACACA

Reverse complement motif Consensus sequence: TGTGTGTGTGTG



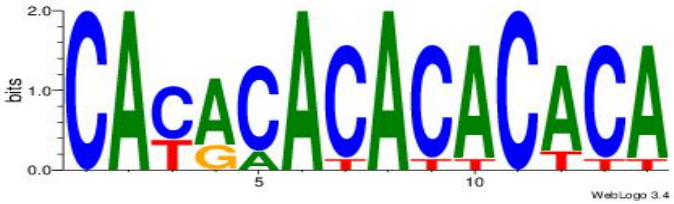


Dataset #:	2
Motif ID:	27
Motif name:	Motif 27
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.0439692

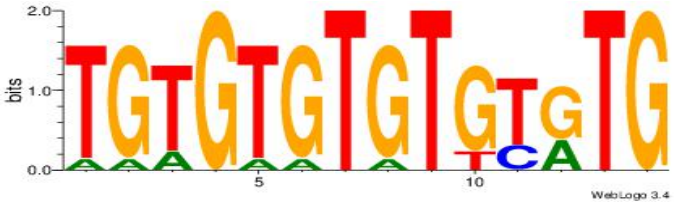
Alignment:

```
TGTGTGTGTGTKTG
-HTGTTTTTGHH--
```

Original motif Consensus sequence: CAYACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTKT



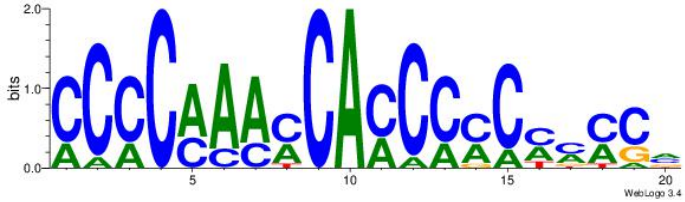
Dataset #:	3
Motif ID:	34

Motif name:	RREB1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.0504266

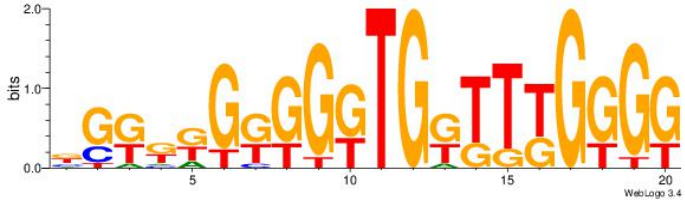
Alignment:

```
CCCCMAAMCAMCCMCMMMCV
------HHCAAAAACAH---
```

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



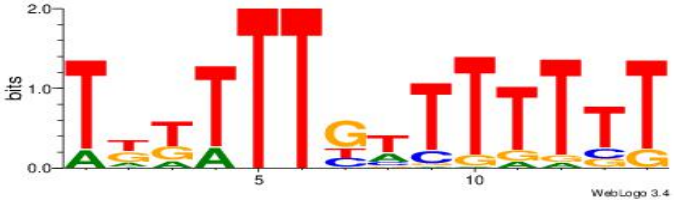
Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG



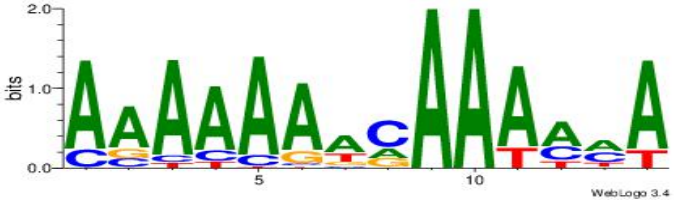
Dataset #:	2
Motif ID:	26
Motif name:	Motif 26
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.0546799

Alignment:
AAAAAAACAAARRA
HHCAAAAACAH---

Original motif Consensus sequence: TKKTTTGTTTTTTT



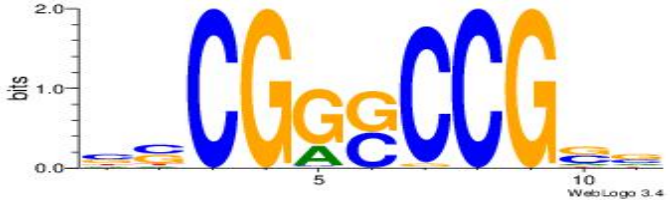
Reverse complement motif Consensus sequence: AAAAAAACAAARR



Dataset #: 4 Motif ID: 87 Motif name: ssCGGsYCGss

Original motif Consensus sequence: BSCGGSCCGSV

Reverse complement motif Consensus sequence: VSCGGSCCGSB



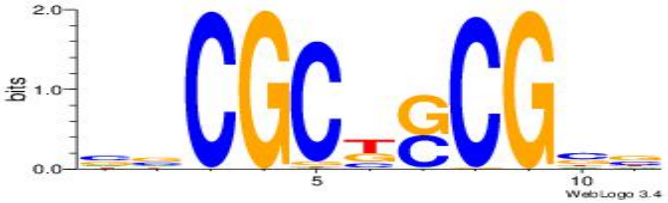
Best Matches for Motif ID 87 (Highest to Lowest)

Dataset #:	4
Motif ID:	94
Motif name:	ssCGCksCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1

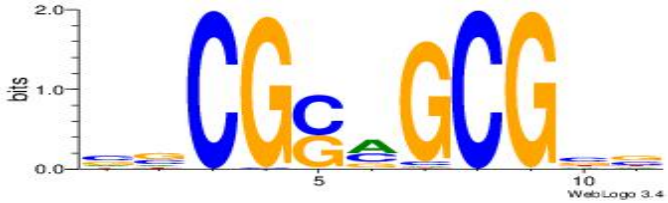
Number of overlap: 11
Similarity score: 0.00942713

Alignment:
BBCGSRGCGVV
BSCGGSCCGSV

Original motif Consensus sequence: VVCGCKSCGBB



Reverse complement motif Consensus sequence: BBCGSRGCGVV

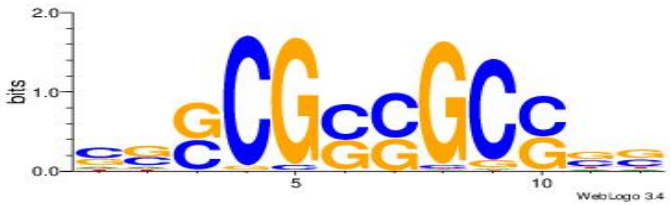


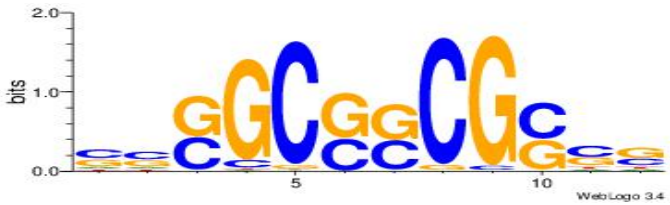
Dataset #: 4
Motif ID: 78
Motif name: sssCGssGCsss
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 2
Number of overlap: 11
Similarity score: 0.0201656

Alignment:
SSSCGSSGCSSS
-BSCGGSCCGSV

Original motif Consensus sequence: SSSCGSSGCSSS

Reverse complement motif Consensus sequence: SSSGCSSCGSSS





Dataset #:	4
Motif ID:	72
Motif name:	ssCKCwsCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0329154

Alignment:

```
BVCGCWSCGBV
BSCGGSCCGSV
```

Original motif Consensus sequence: BVCGCWSCGBV

Reverse complement motif Consensus sequence: VBCGSWGCGVB

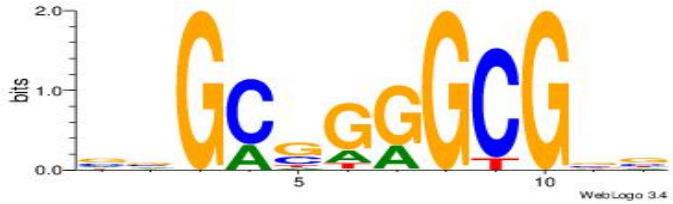
Dataset #:	4
Motif ID:	67

Motif name:	ssGMsGRGCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.0352797

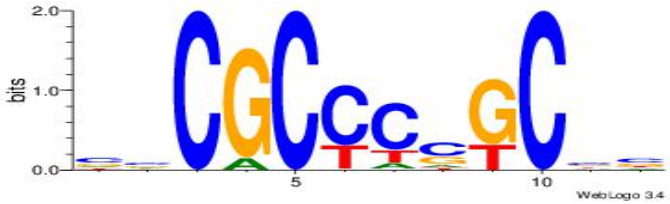
Alignment:

```
BBCGCCCSGCVV
-BSCGGSCCGSV
```

Original motif Consensus sequence: VVGCSGGGCGBB



Reverse complement motif Consensus sequence: BBCGCCCSGCVV



Dataset #:	4
Motif ID:	99
Motif name:	sgCTGGCCAGcs
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:	0.0445112

Alignment:
VVCTGGCCAGBB
-BSCGGSCCGSV

Original motif Consensus sequence: BBCTGGCCAGVV

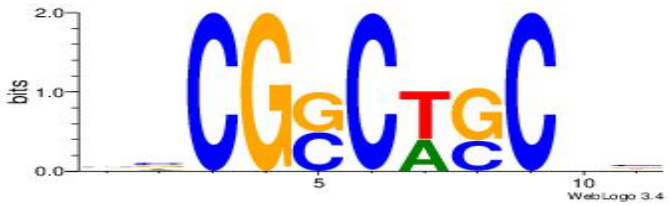
Reverse complement motif Consensus sequence: VVCTGGCCAGBB

Dataset #:	4
Motif ID:	90
Motif name:	ssCGsCwsCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.045232

Alignment:
BBCGSCWSCBB
BSCGGSCCGSV

Original motif Consensus sequence: BBCGSCWSCBB

Reverse complement motif Consensus sequence: BBGSWGSCGBB

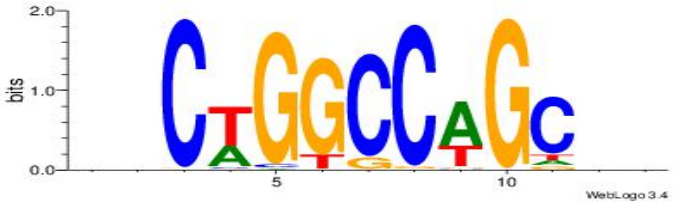


Dataset #:	4
Motif ID:	80
Motif name:	ssCwGGCCwGCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	11
Similarity score:	0.0469326

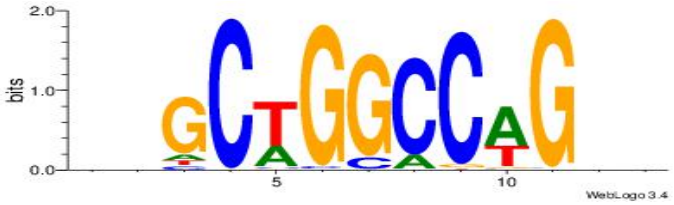
Alignment:

```
BBGCTGGCCWGBB
-BSCGGSCCGSV-
```

Original motif Consensus sequence: BBCWGGCCAGCBB



Reverse complement motif Consensus sequence: BBGCTGGCCWGBB



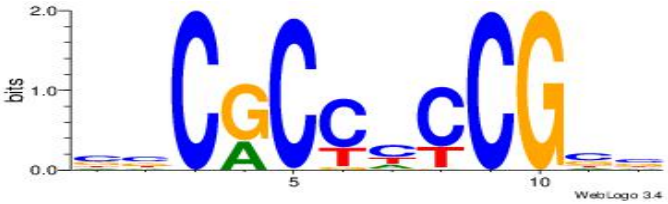
Dataset #:	4
Motif ID:	88

Motif name:	ssCrCYyYCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	11
Similarity score:	0.0505053

Alignment:

```
BBCRCCYCCGBB
BSCGGSCCGSV-
```

Original motif Consensus sequence: BBCRCCYCCGBB



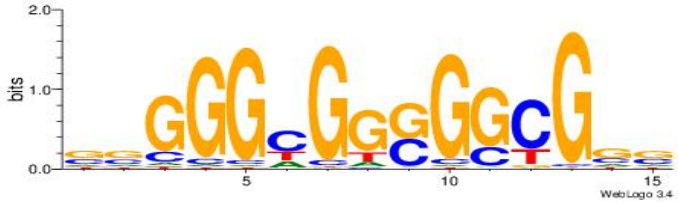
Reverse complement motif Consensus sequence: BBCGGKGGMGBB

Dataset #:	4
Motif ID:	91
Motif name:	ssCGCCsCCrCCCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	11
Similarity score:	0.0554905

Alignment:
SSGGGCGGSGGCGSS
----VSCGGSCCGSB

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS

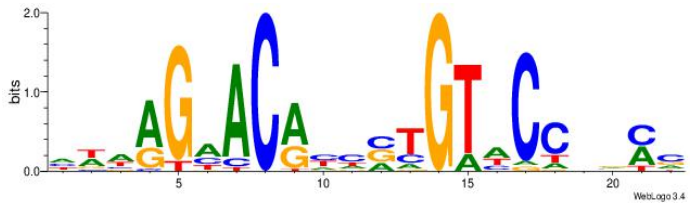


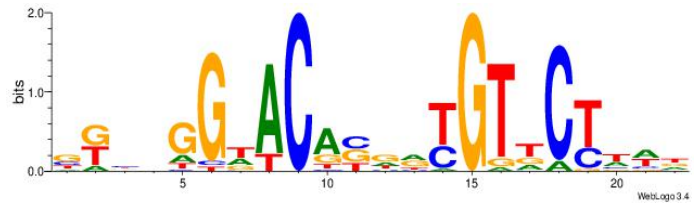
Dataset #:	3
Motif ID:	40
Motif name:	Ar
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	11
Number of overlap:	11
Similarity score:	0.0607093

Alignment:
VRVDGGHACAVDDKGTHCTDWH
----------BSCGGSCCGSV-

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV

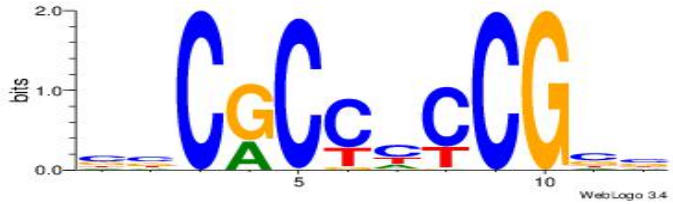
Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH





Dataset #: 4 Motif ID: 88 Motif name: ssCrCYyYCGss

Original motif Consensus sequence: BBCRCCYCCGBB



Reverse complement motif Consensus sequence: BBCGGKGGMGBB

Best Matches for Motif ID 88 (Highest to Lowest)

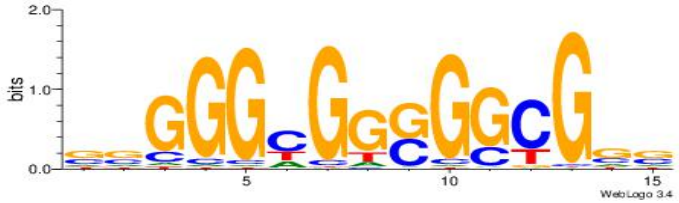
Dataset #:	4
Motif ID:	91
Motif name:	ssCGCCsCCrCCCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.0119821

Alignment:

```
SSGGGCGGSGGCGSS
---BBCGGKGGMGBB
```

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS

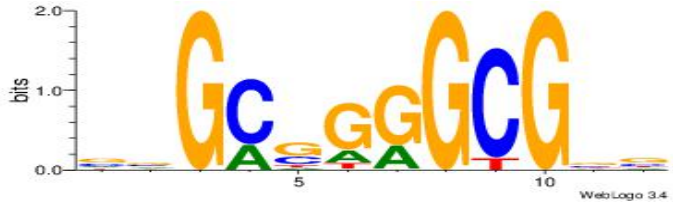


Dataset #:	4
Motif ID:	67
Motif name:	ssGMsGRGCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.0239039

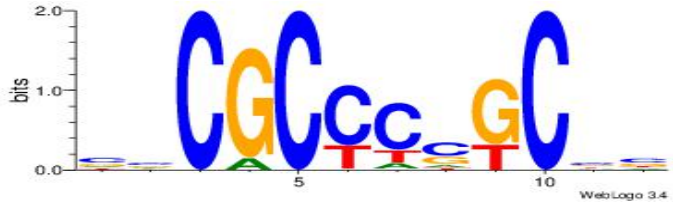
Alignment:

```
BBCGCCCSGCVV
BBCRCCYCCGBB
```

Original motif Consensus sequence: VVGCSGGGCGBB



Reverse complement motif Consensus sequence: BBCGCCCSGCVV

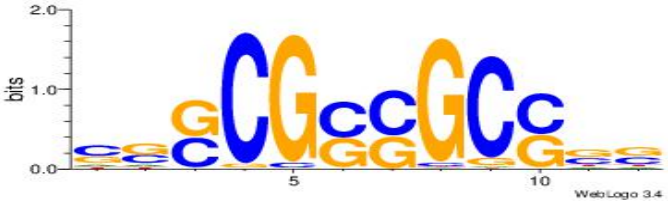


Dataset #:	4
Motif ID:	78
Motif name:	sssCGssGCsss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.0369717

Alignment:

```
SSSCGSSGCSSS
BBCGGKGGMGBB
```

Original motif Consensus sequence: SSSCGSSGCSSS



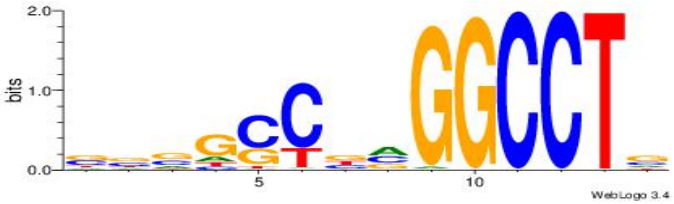
Reverse complement motif Consensus sequence: SSSGCSSCGSSS

Dataset #:	3
Motif ID:	28
Motif name:	Zfx
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	12

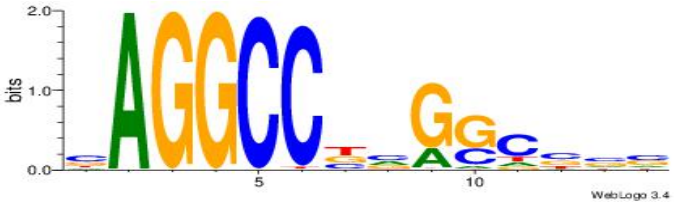
Similarity score: 0.0460326

Alignment:
VAGGCCBBGGCVBB
--BBCGGKGGMGBB

Original motif Consensus sequence: BBVGCCBVGGCCTV



Reverse complement motif Consensus sequence: VAGGCCBBGGCVB

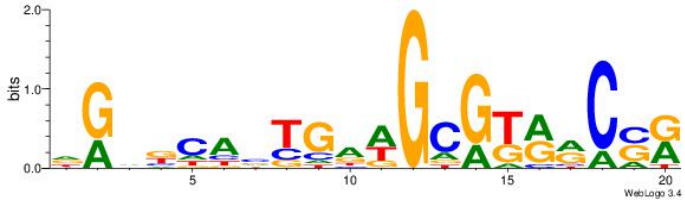


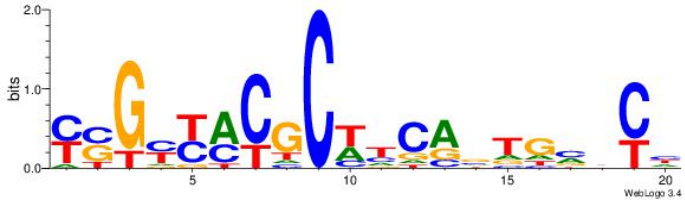
Dataset #: 3
Motif ID: 61
Motif name: Pax5
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 5
Number of overlap: 12
Similarity score: 0.0474361

Alignment:
MSGKKRCGCWDCABTGBBCD
----BBCRCCYCCGBB----

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR

Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD



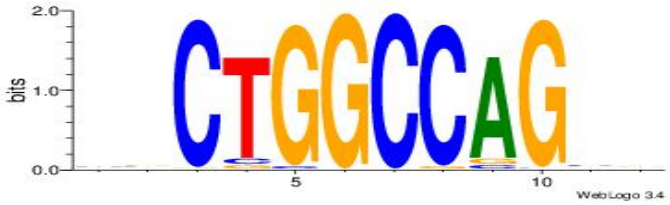


Dataset #:	4
Motif ID:	99
Motif name:	sgCTGGCCAGcs
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.0523473

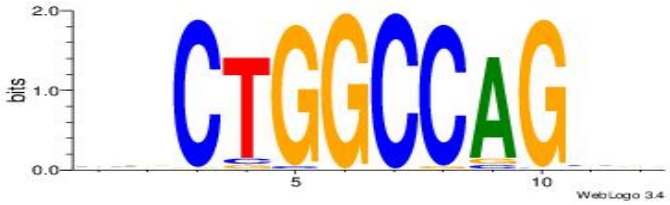
Alignment:

```
VVCTGGCCAGBB
BBCGGKGGMGBB
```

Original motif Consensus sequence: BBCTGGCCAGVV



Reverse complement motif Consensus sequence: VVCTGGCCAGBB



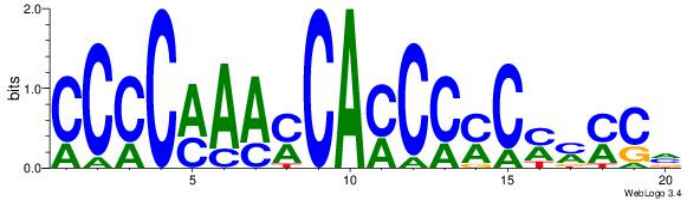
Dataset #:	3
Motif ID:	34

Motif name:	RREB1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	12
Similarity score:	0.0532597

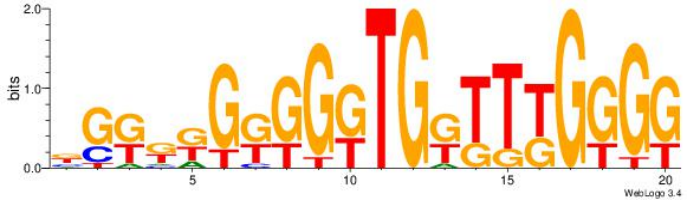
Alignment:

```
CCCCMAAMCAMCCMCMMMCV
------BBCRCCYCCGBB--
```

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



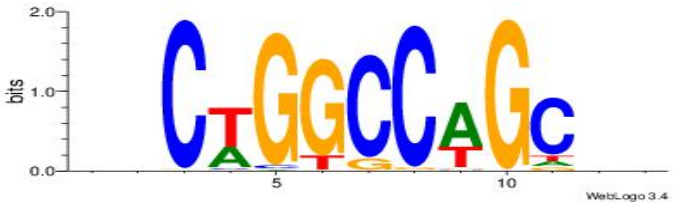
Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG



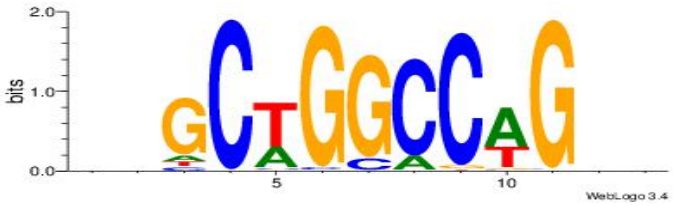
Dataset #:	4
Motif ID:	80
Motif name:	ssCwGGCCwGCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.0537463

Alignment:
BBGCTGGCCWGBB
-BBCGGKGGMGBB

Original motif Consensus sequence: BBCWGGCCAGCBB



Reverse complement motif Consensus sequence: BBGCTGGCCWGBB

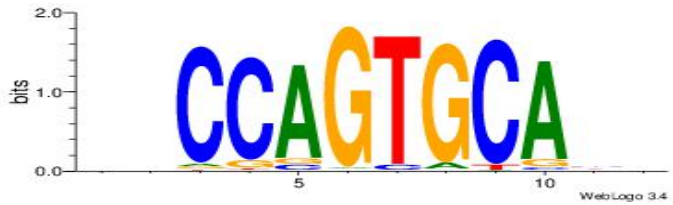


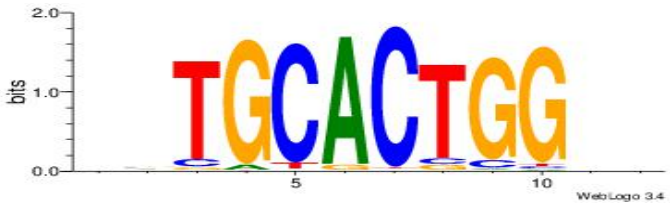
Dataset #:	4
Motif ID:	103
Motif name:	ccCCAGTGCAbr
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.0600002

Alignment:
HVCCAGTGCABD
BBCGGKGGMGBB

Original motif Consensus sequence: HVCCAGTGCABD

Reverse complement motif Consensus sequence: DBTGCACTGGVD



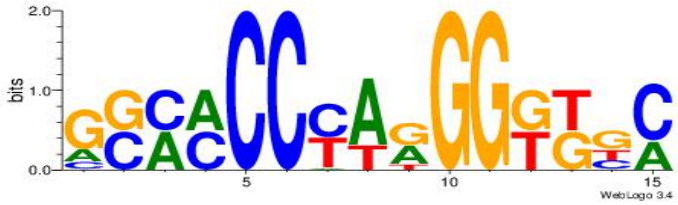


Dataset #:	3
Motif ID:	29
Motif name:	Zfp423
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.0618402

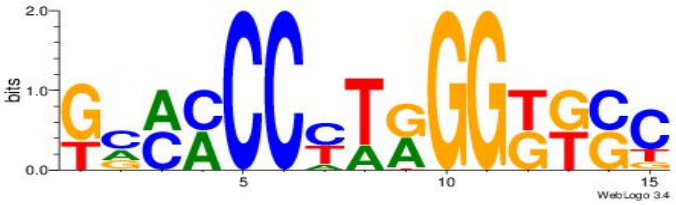
Alignment:

```
GYRYCCMTKGGYRSC
---BBCGGKGGMGBB
```

Original motif Consensus sequence: GSMMCCYARGGKKKC

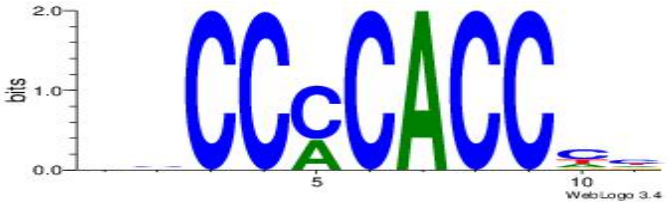


Reverse complement motif Consensus sequence: GYRYCCMTKGGYR



Dataset #: 4 Motif ID: 89 Motif name: ccCCmCACCcc

Original motif Consensus sequence: HBCCMCACCHH



Reverse complement motif Consensus sequence: DDGGTGRGGBD

Best Matches for Motif ID 89 (Highest to Lowest)

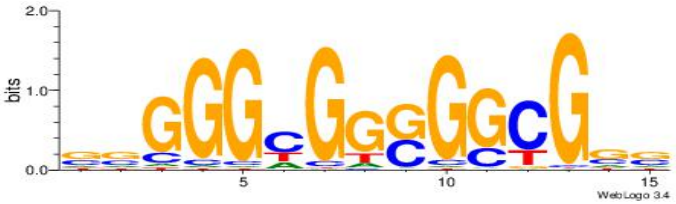
Dataset #:	4
Motif ID:	91
Motif name:	ssCGCCsCCrCCCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	11
Similarity score:	0.0286981

Alignment:

```
SSCGCCSCCGCCCSS
---HBCCMCACCHH-
```

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS

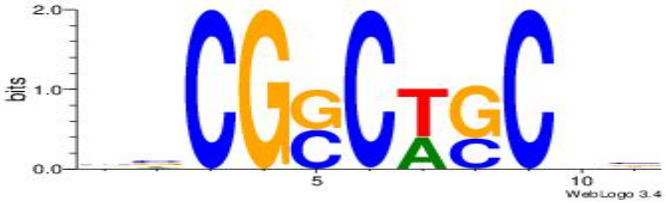


Dataset #:	4
Motif ID:	90
Motif name:	ssCGsCwsCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.0343768

Alignment:

```
BBCGSCWSCBB
HBCCMCACCHH
```

Original motif Consensus sequence: BBCGSCWSCBB



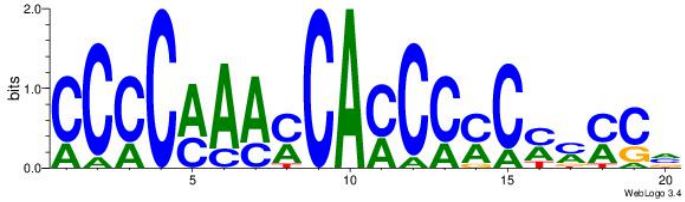
Reverse complement motif Consensus sequence: BBGSWGSCGBB

Dataset #:	3
Motif ID:	34
Motif name:	RREB1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	11

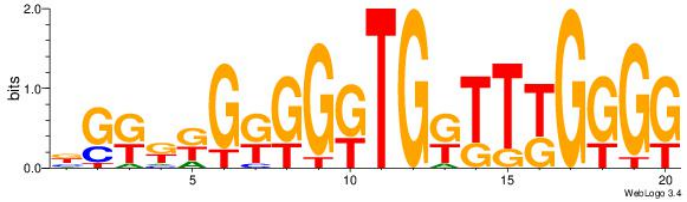
Similarity score: 0.0408135

Alignment:
CCCCMAAMCAMCCMCMMMCV
------HBCCMCACCHH---

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG

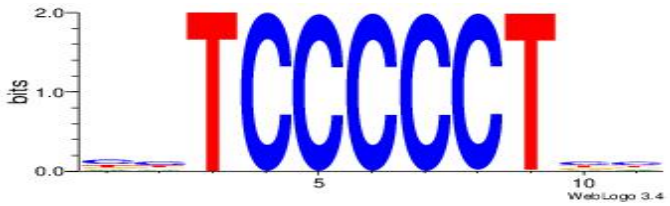


Dataset #: 4
Motif ID: 93
Motif name: rrAGGGGGArr
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 1
Number of overlap: 11
Similarity score: 0.0470142

Alignment:
VVTCCCCCTVV
HBCCMCACCHH

Original motif Consensus sequence: VVAGGGGGAVV

Reverse complement motif Consensus sequence: VVTCCCCCTVV

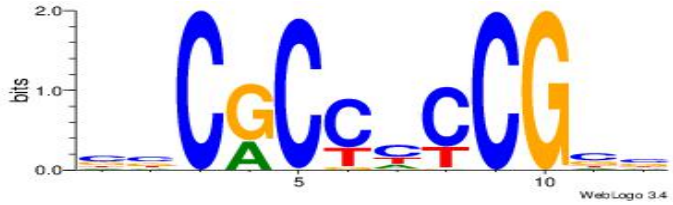


Dataset #:	4
Motif ID:	88
Motif name:	ssCrCYyYCGss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.0504854

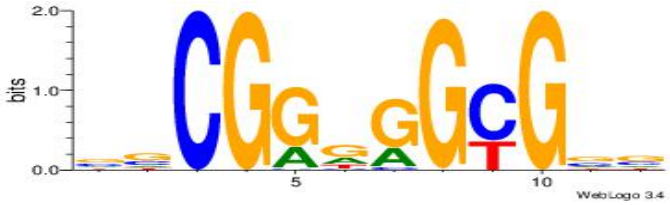
Alignment:

```
BBCGGKGGMGBB
-DDGGTGRGGBD
```

Original motif Consensus sequence: BBCRCCYCCGBB



Reverse complement motif Consensus sequence: BBCGGKGGMGBB



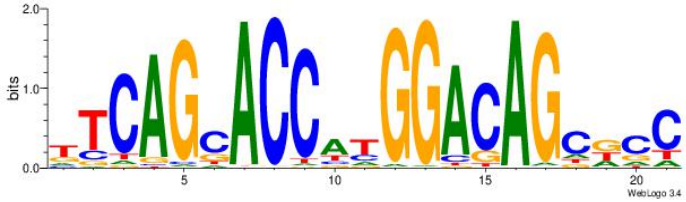
Dataset #:	3
Motif ID:	35

Motif name:	REST
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	11
Number of overlap:	11
Similarity score:	0.0523948

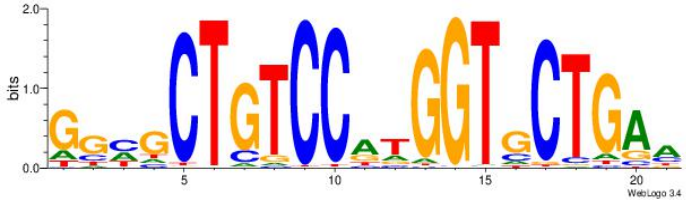
Alignment:

```
TTCAGCACCATGGACAGCKCC
HBCCMCACCHH----------
```

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC



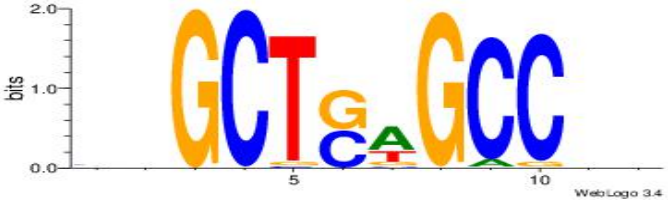
Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA



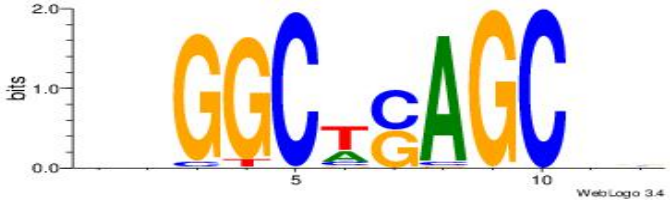
Dataset #:	4
Motif ID:	77
Motif name:	ssGCTswGCCms
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0560955

Alignment:
BDGGCTSAGCBV
HBCCMCACCHH-

Original motif Consensus sequence: VBGCTSAGCCHB



Reverse complement motif Consensus sequence: BDGGCTSAGCBV

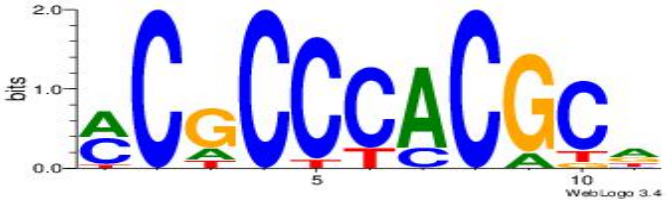


Dataset #:	3
Motif ID:	44
Motif name:	Egr1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.0561812

Alignment:
HGCGTGGGCGK
DDGGTGRGGBD

Original motif Consensus sequence: HGCGTGGGCGK

Reverse complement motif Consensus sequence: YCGCCCACGCH

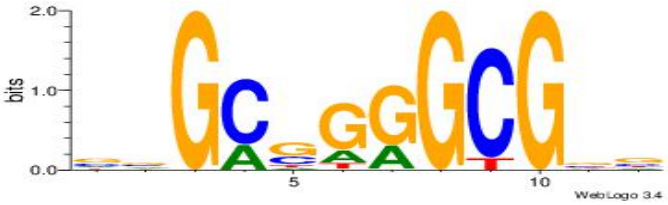


Dataset #:	4
Motif ID:	67
Motif name:	ssGMsGRGCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	11
Similarity score:	0.0572567

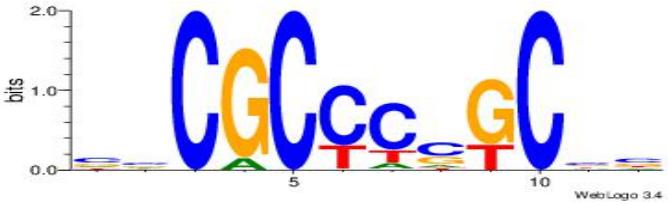
Alignment:

```
BBCGCCCSGCVV
HBCCMCACCHH-
```

Original motif Consensus sequence: VVGCSGGGCGBB



Reverse complement motif Consensus sequence: BBCGCCCSGCVV



Dataset #:	3
Motif ID:	51

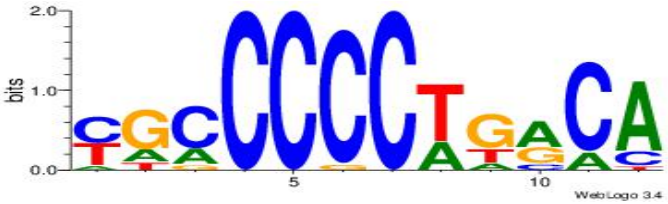
Motif name:	INSM1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.0585334

Alignment:

```
TGYCAGGGGGCR
-DDGGTGRGGBD
```

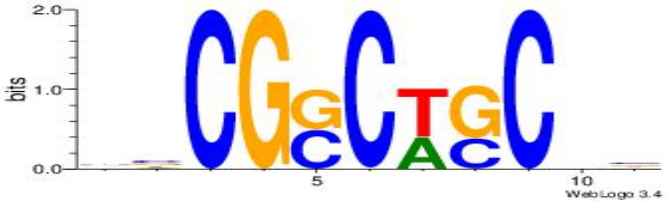
Original motif Consensus sequence: TGYCAGGGGGCR

Reverse complement motif Consensus sequence: MGCCCCCTGMCA



Dataset #: 4 Motif ID: 90 Motif name: ssCGsCwsCss

Original motif Consensus sequence: BBCGSCWSCBB



Reverse complement motif Consensus sequence: BBGSWGSCGBB

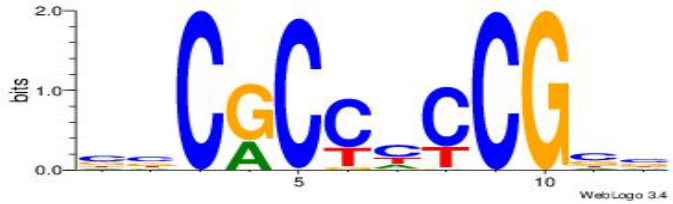
Best Matches for Motif ID 90 (Highest to Lowest)

Dataset #:	4
Motif ID:	88
Motif name:	ssCrCYyYCGss
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:	0.0236246

Alignment:

```
BBCGGKGGMGBB
-BBGSWGSCGBB
```

Original motif Consensus sequence: BBCRCCYCCGBB



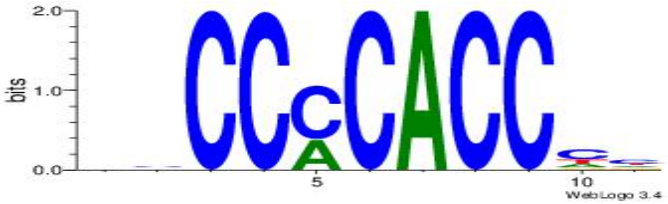
Reverse complement motif Consensus sequence: BBCGGKGGMGBB

Dataset #:	4
Motif ID:	89
Motif name:	ccCCmCACCcc
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11

Similarity score: 0.0238413

Alignment:
DDGGTGRGGBD
BBGSWGSCGBB

Original motif Consensus sequence: HBCCMCACCHH



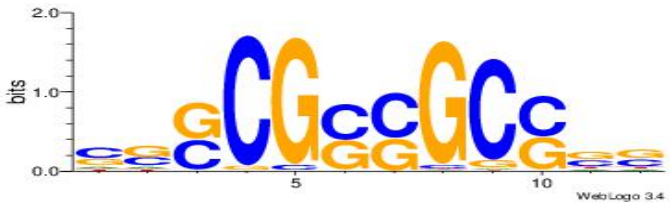
Reverse complement motif Consensus sequence: DDGGTGRGGBD

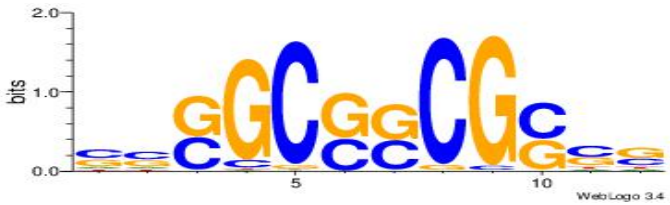
Dataset #: 4
Motif ID: 78
Motif name: sssCGssGCsss
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 2
Number of overlap: 11
Similarity score: 0.0239515

Alignment:
SSSCGSSGCSSS
-BBCGSCWSCBB

Original motif Consensus sequence: SSSCGSSGCSSS

Reverse complement motif Consensus sequence: SSSGCSSCGSSS



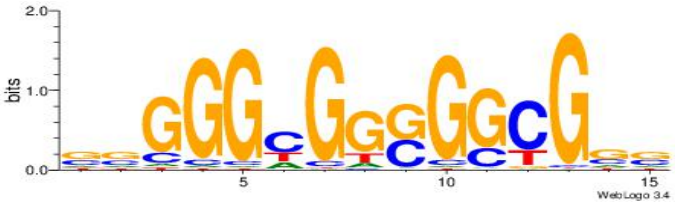


Dataset #: 4
Motif ID: 91
Motif name: ssCGCCsCCrCCCss
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 1
Number of overlap: 11
Similarity score: 0.0274779

Alignment:
SSGGGCGGSGGCGSS
----BBGSWGSCGBB

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS



Dataset #: 4

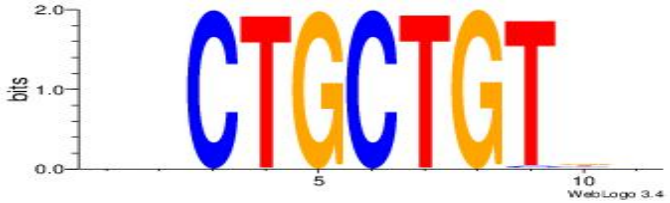
Motif ID:	82
Motif name:	rmACAGCAGsr
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0336118

Alignment:

```
DVCTGCTGTVB
BBCGSCWSCBB
```

Original motif Consensus sequence: VVACAGCAGVD

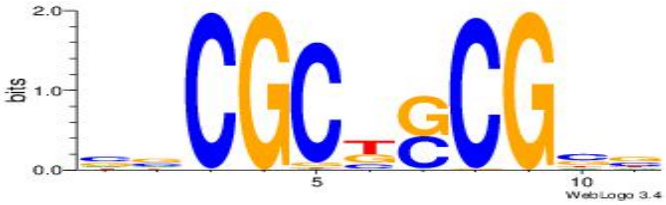
Reverse complement motif Consensus sequence: DVCTGCTGTVB



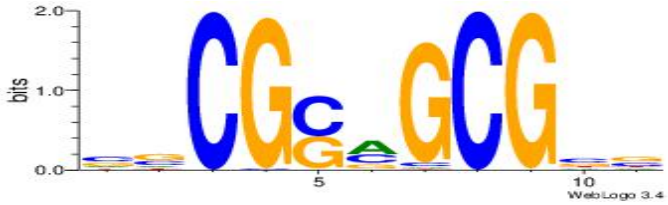
Dataset #:	4
Motif ID:	94
Motif name:	ssCGCksCGss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.0337912

Alignment:
VVCGCKSCGBB
BBGSWGSCGBB

Original motif Consensus sequence: VVCGCKSCGBB



Reverse complement motif Consensus sequence: BBCGSRGCGVV

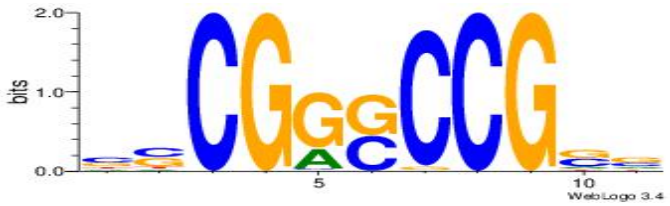


Dataset #:	4
Motif ID:	87
Motif name:	ssCGGsYCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0346171

Alignment:
BSCGGSCCGSV
BBCGSCWSCBB

Original motif Consensus sequence: BSCGGSCCGSV

Reverse complement motif Consensus sequence: VSCGGSCCGSB

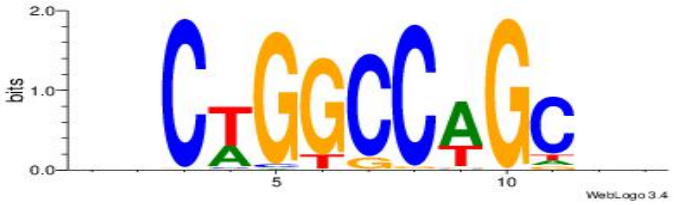


Dataset #:	4
Motif ID:	80
Motif name:	ssCwGGCCwGCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.0353683

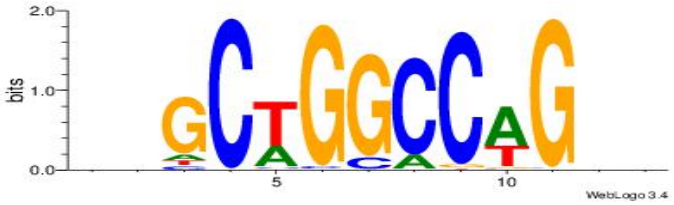
Alignment:

```
BBGCTGGCCWGBB
BBGSWGSCGBB--
```

Original motif Consensus sequence: BBCWGGCCAGCBB



Reverse complement motif Consensus sequence: BBGCTGGCCWGBB



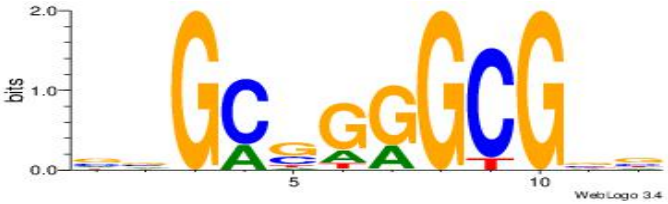
Dataset #:	4
Motif ID:	67

Motif name:	ssGMsGRGCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.0362688

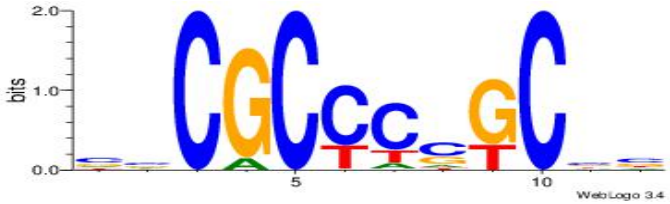
Alignment:

```
BBCGCCCSGCVV
-BBCGSCWSCBB
```

Original motif Consensus sequence: VVGCSGGGCGBB



Reverse complement motif Consensus sequence: BBCGCCCSGCVV



Dataset #:	4
Motif ID:	72
Motif name:	ssCKCwsCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0409983

Alignment:
VBCGSWGCGVB
BBCGSCWSCBB

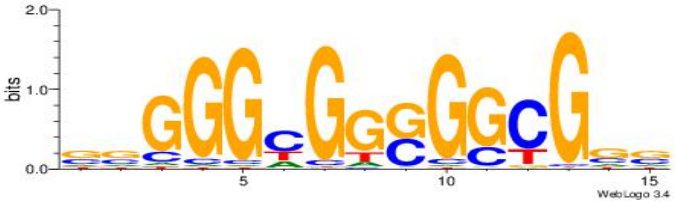
Original motif Consensus sequence: BVCGCWSCGBV

Reverse complement motif Consensus sequence: VBCGSWGCGVB

Dataset #: 4 Motif ID: 91 Motif name: ssCGCCsCCrCCCss

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS



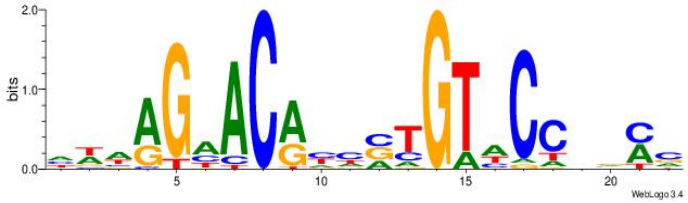
Best Matches for Motif ID 91 (Highest to Lowest)

Dataset #:	3
Motif ID:	40
Motif name:	Ar
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward

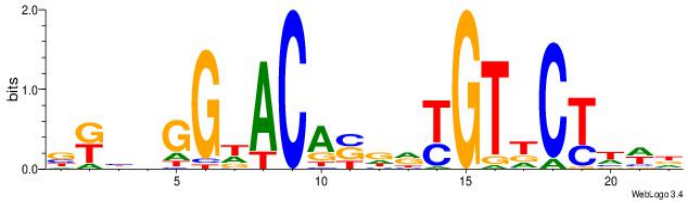
Position number:	3
Number of overlap:	15
Similarity score:	0.059922

Alignment:
HWDAGHACRHHVTGTHCCHVMV
-----SSCGCCSCCGCCCSS--

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



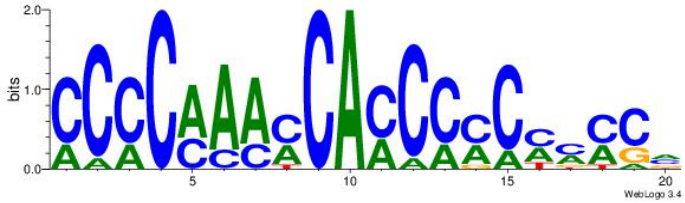
Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH



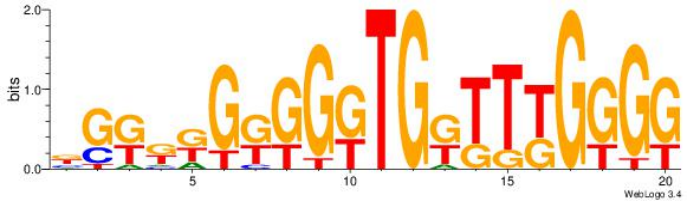
Dataset #:	3
Motif ID:	34
Motif name:	RREB1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	15
Similarity score:	0.0619876

Alignment:
CCCCMAAMCAMCCMCMMMCV
SSCGCCSCCGCCCSS-----

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG

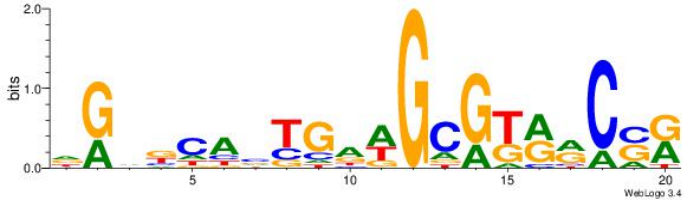


Dataset #:	3
Motif ID:	61
Motif name:	Pax5
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	15
Similarity score:	0.0630737

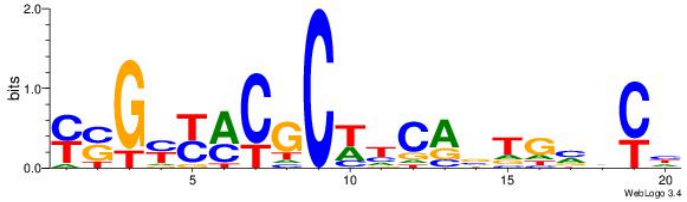
Alignment:

```
MSGKKRCGCWDCABTGBBCD
-SSCGCCSCCGCCCSS----
```

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR



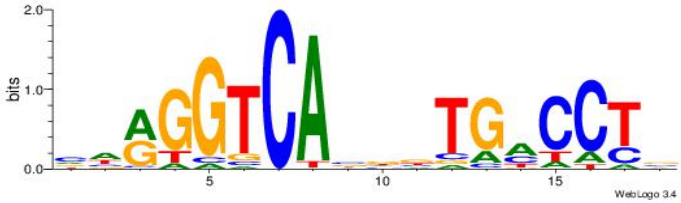
Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD



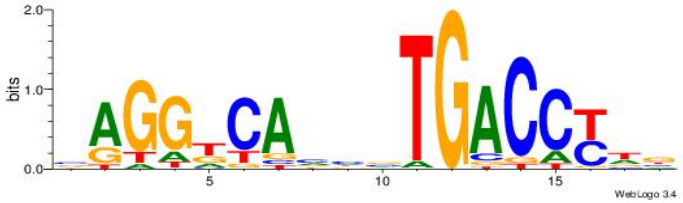
Dataset #:	3
Motif ID:	46
Motif name:	ESR2
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	15
Similarity score:	0.0682659

Alignment:
BAGGYCABHBTGACCKHV
SSCGCCSCCGCCCSS---

Original motif Consensus sequence: VHRGGTCABDBTGMCCTB



Reverse complement motif Consensus sequence:
BAGGYCABHBTGACCKHV

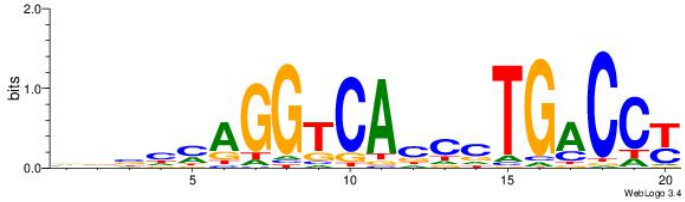


Dataset #:	3
Motif ID:	45
Motif name:	ESR1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4

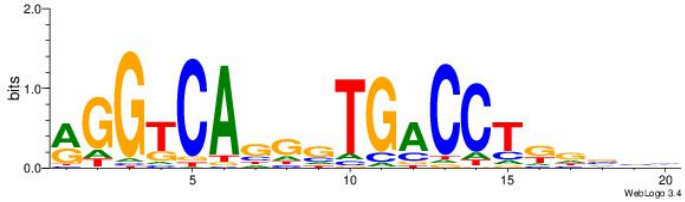
Number of overlap: 15
Similarity score: 0.0700979

Alignment:
VDBHMAGGTCACCCTGACCY
--SSGGGCGGSGGCGSS---

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY



Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV

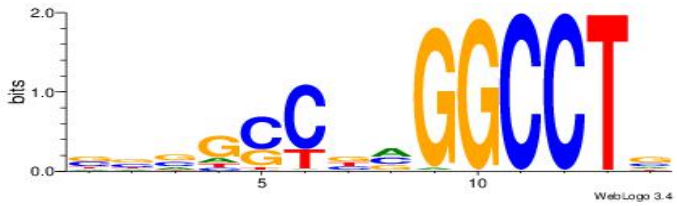


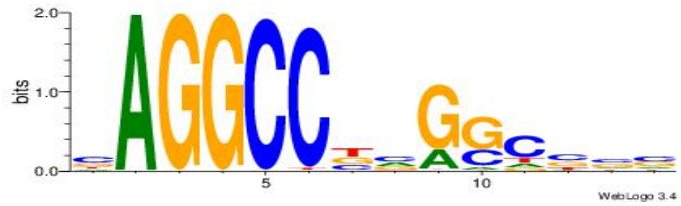
Dataset #: 3
Motif ID: 28
Motif name: Zfx
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 14
Similarity score: 0.537296

Alignment:
BBVGCCBVGGCCTV-
SSCGCCSCCGCCCSS

Original motif Consensus sequence: BBVGCCBVGGCCTV

Reverse complement motif Consensus sequence: VAGGCCBBGGCVE



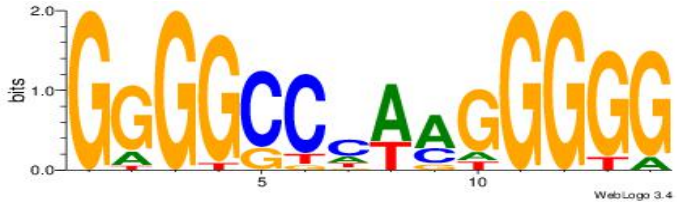


Dataset #:	3
Motif ID:	37
Motif name:	PLAG1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.564943

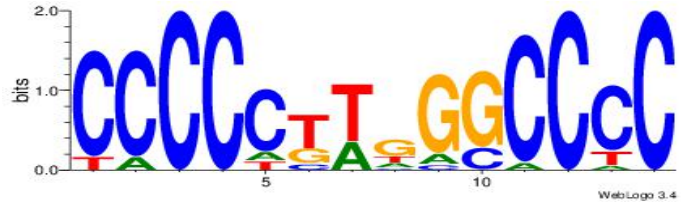
Alignment:

```
-GGGGCCCAAGGGGG
SSGGGCGGSGGCGSS
```

Original motif Consensus sequence: GGGGCCCAAGGGGG



Reverse complement motif Consensus sequence: CCCCCTTGGGCCC



Dataset #:	3
Motif ID:	36

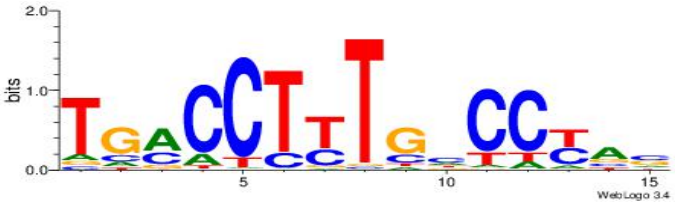
Motif name:	PPARGRXRA
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	14
Similarity score:	0.568444

Alignment:

```
TGRCCTKTGHCCKAB-
-SSCGCCSCCGCCCSS
```

Original motif Consensus sequence: BTRGGDCARAGGKCA

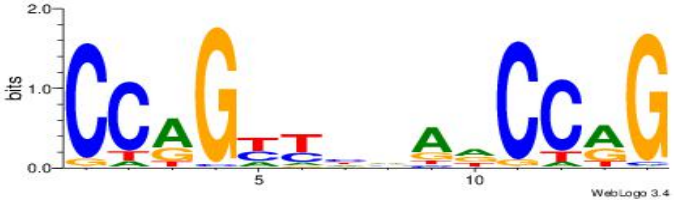
Reverse complement motif Consensus sequence: TGRCCTKTGHCCK



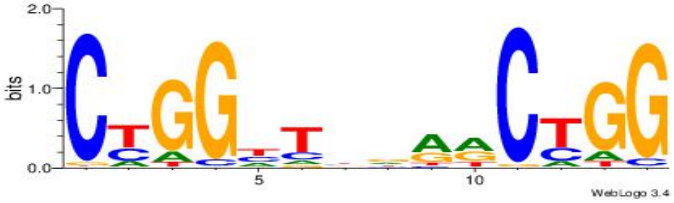
Dataset #:	3
Motif ID:	64
Motif name:	Tcfcp2l1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.569229

Alignment:
-CCAGYYHVADCCRG
SSCGCCSCCGCCCSS

Original motif Consensus sequence: CCAGYYHVADCCRG



Reverse complement motif Consensus sequence: CKGGDTBDMMCT

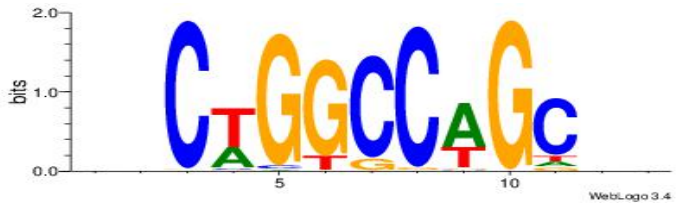


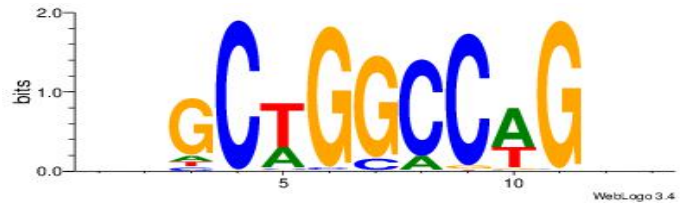
Dataset #:	4
Motif ID:	80
Motif name:	ssCwGGCCwGCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	13
Similarity score:	1.06715

Alignment:
BBCWGGCCAGCBB--
SSCGCCSCCGCCCSS

Original motif Consensus sequence: BBCWGGCCAGCBB

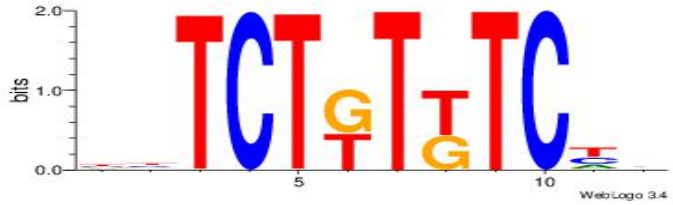
Reverse complement motif Consensus sequence: BBGCTGGCCWGB





Dataset #: 4 Motif ID: 92 Motif name: tyTCTkTkTCyy

Original motif Consensus sequence: BBTCTKTKTCHB



Reverse complement motif Consensus sequence: VHGARAYAGAVV

Best Matches for Motif ID 92 (Highest to Lowest)

Dataset #:	4
Motif ID:	75
Motif name:	yayAyAyACATrya
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	12
Similarity score:	0.0337934

Alignment:

```
HACAYAYACATRHD
--VHGARAYAGAVV
```

Original motif Consensus sequence: HACAYAYACATRHD

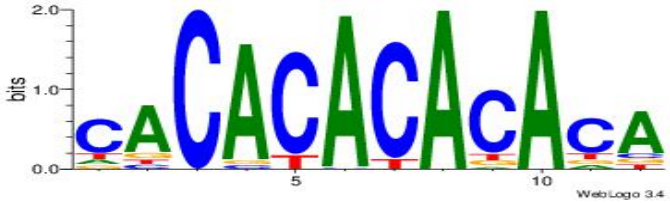
Reverse complement motif Consensus sequence: DHKATGTKTKTGT

Dataset #:	4
Motif ID:	95
Motif name:	CACACACACACA
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:	0.0374053

Alignment:

```
TGTGTGTGTGTG
BBTCTKTKTCHB
```

Original motif Consensus sequence: CACACACACACA



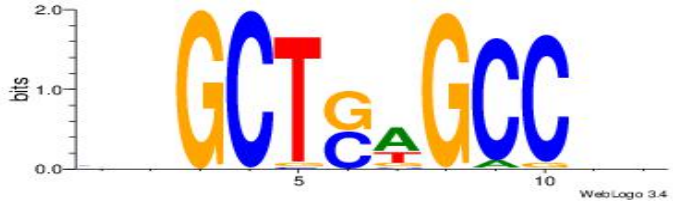
Reverse complement motif Consensus sequence: TGTGTGTGTGTG

Dataset #:	4
Motif ID:	77
Motif name:	ssGCTswGCCms
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:	0.0380798

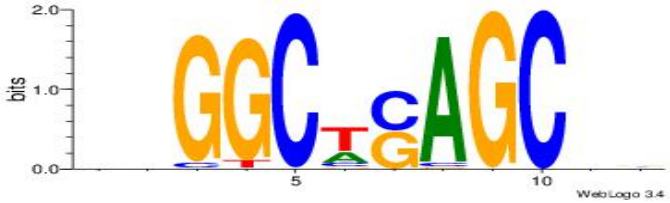
Alignment:

```
VBGCTSAGCCHB
BBTCTKTKTCHB
```

Original motif Consensus sequence: VBGCTSAGCCHB



Reverse complement motif Consensus sequence: BDGGCTSAGCBV

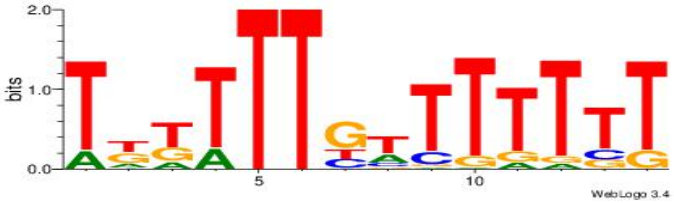


Dataset #:	2
Motif ID:	26
Motif name:	Motif 26
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	12

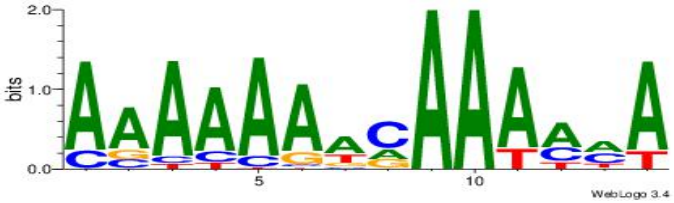
Similarity score: 0.0383981

Alignment:
AAAAAAACAAARRA
-VHGARAYAGAVV-

Original motif Consensus sequence: TKKTTTGTTTTTTT



Reverse complement motif Consensus sequence: AAAAAAACAAARR

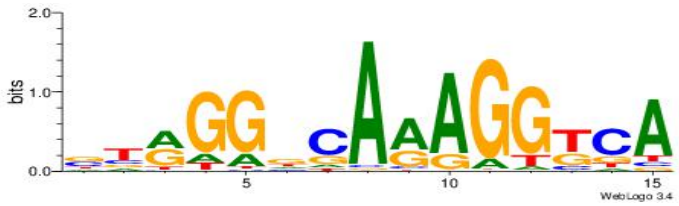


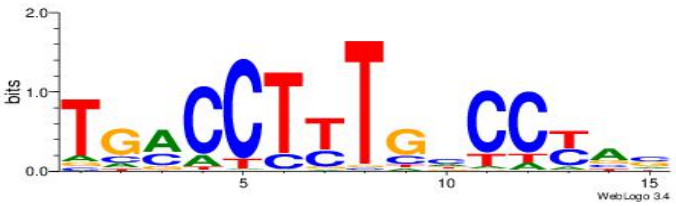
Dataset #: 3
Motif ID: 36
Motif name: PPARGRXRA
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 3
Number of overlap: 12
Similarity score: 0.0399569

Alignment:
BTRGGDCARAGGKCA
-VHGARAYAGAVV--

Original motif Consensus sequence: BTRGGDCARAGGKCA

Reverse complement motif Consensus sequence: TGRCCTKTGHCCK



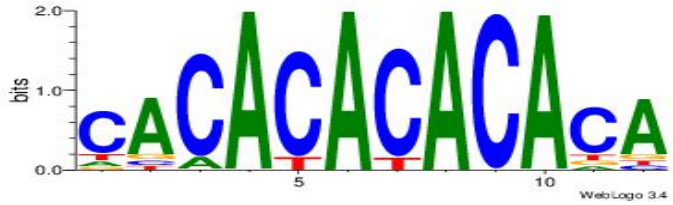


Dataset #:	4
Motif ID:	79
Motif name:	CACACACACACA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.0403405

Alignment:

```
CACACACACACA
VHGARAYAGAVV
```

Original motif Consensus sequence: CACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTG

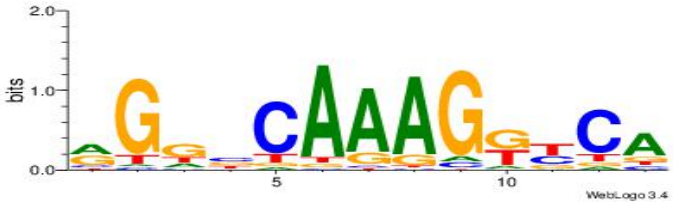
Dataset #:	3
Motif ID:	50

Motif name:	HNF4A
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:	0.0411089

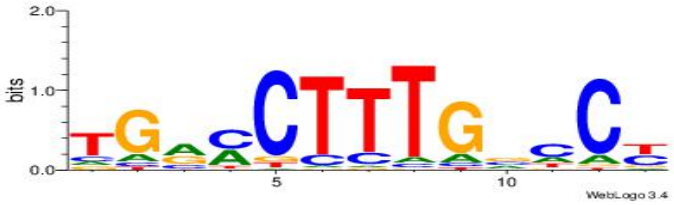
Alignment:

```
RGGBCAAAGKYCA
-VHGARAYAGAVV
```

Original motif Consensus sequence: RGGBCAAAGKYCA



Reverse complement motif Consensus sequence: TGMYCTTTGBCCK



Dataset #:	4
Motif ID:	100
Motif name:	wrTGTATACAyw
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:	0.0525228

Alignment:
HDTGTATACAHD
VHGARAYAGAVV

Original motif Consensus sequence: HDTGTATACAHD

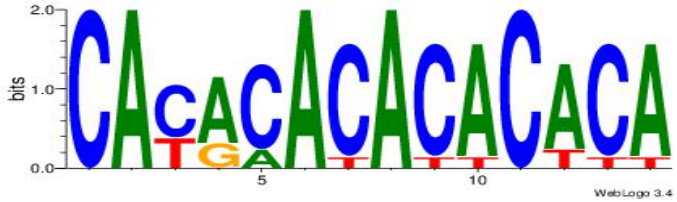
Reverse complement motif Consensus sequence: DHTGTATACADH

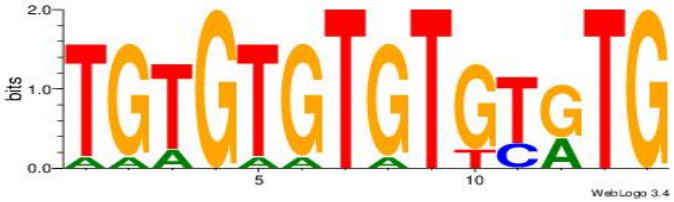
Dataset #:	2
Motif ID:	27
Motif name:	Motif 27
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	12
Similarity score:	0.0539512

Alignment:
CAYACACACACACA
VHGARAYAGAVV--

Original motif Consensus sequence: CAYACACACACACA

Reverse complement motif Consensus sequence: TGTGTGTGTGTKT

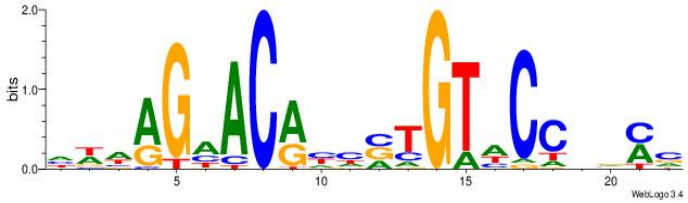




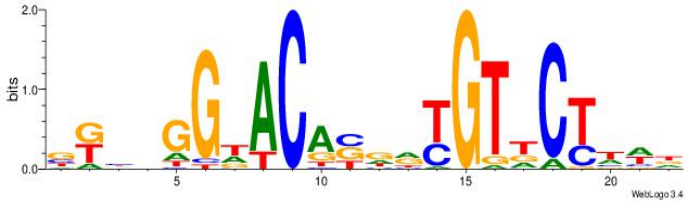
Dataset #: 3
Motif ID: 40
Motif name: Ar
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 9
Number of overlap: 12
Similarity score: 0.057338

Alignment:
HWDAGHACRHHVTGTHCCHVMV
--------BBTCTKTKTCHB--

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



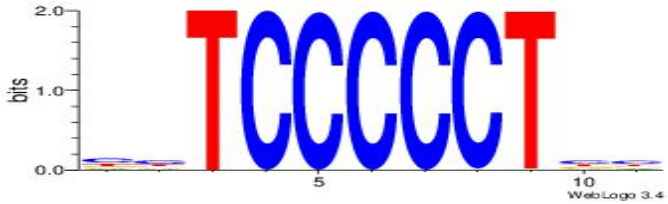
Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH



Dataset #: 4 Motif ID: 93 Motif name: rrAGGGGGArr

Original motif Consensus sequence: VVAGGGGGAVV

Reverse complement motif Consensus sequence: VVTCCCCCTVV



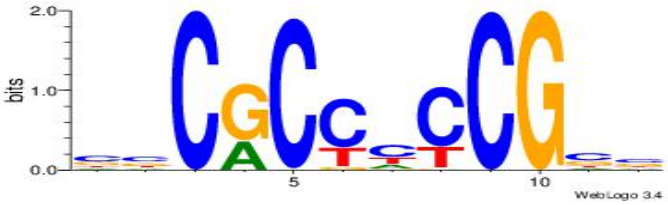
Best Matches for Motif ID 93 (Highest to Lowest)

Dataset #:	4
Motif ID:	88
Motif name:	ssCrCYyYCGss
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:	0.0426359

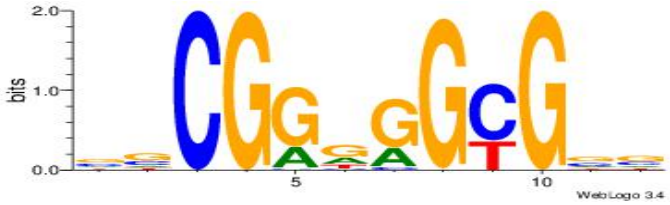
Alignment:

```
BBCRCCYCCGBB
VVTCCCCCTVV-
```

Original motif Consensus sequence: BBCRCCYCCGBB



Reverse complement motif Consensus sequence: BBCGGKGGMGBB



Dataset #:	4
Motif ID:	89
Motif name:	ccCCmCACCcc
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0451601

Alignment:

DDGGTGRGGBD

VVAGGGGGAVV

Original motif Consensus sequence: HBCCMCACCHH

Reverse complement motif Consensus sequence: DDGGTGRGGBD

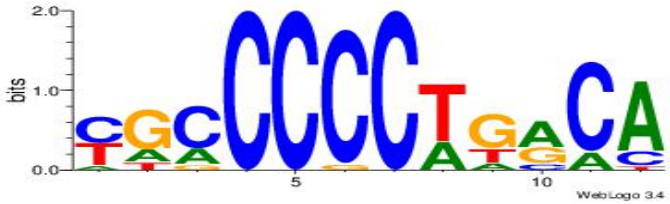
Dataset #:	3
Motif ID:	51
Motif name:	INSM1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11

Similarity score: 0.0507544

Alignment:
MGCCCCCTGMCA
VVTCCCCCTVV-

Original motif Consensus sequence: TGYCAGGGGGCR

Reverse complement motif Consensus sequence: MGCCCCCTGMCA

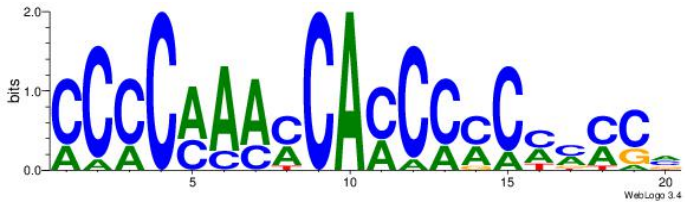


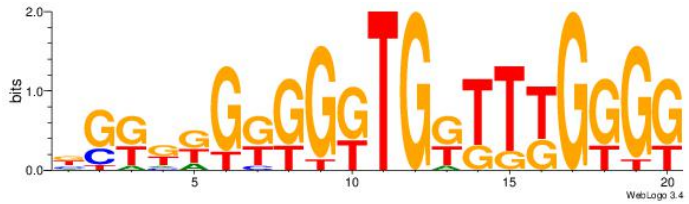
Dataset #: 3
Motif ID: 34
Motif name: RREB1
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 3
Number of overlap: 11
Similarity score: 0.0518016

Alignment:
CCCCMAAMCAMCCMCMMMCV
--VVTCCCCCTVV-------

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV

Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG





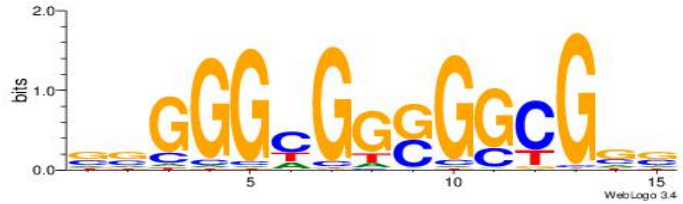
Dataset #:	4
Motif ID:	91
Motif name:	ssCGCCsCCrCCCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	11
Similarity score:	0.057219

Alignment:

```
SSCGCCSCCGCCCSS
---VVTCCCCCTVV-
```

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS



Dataset #:	3

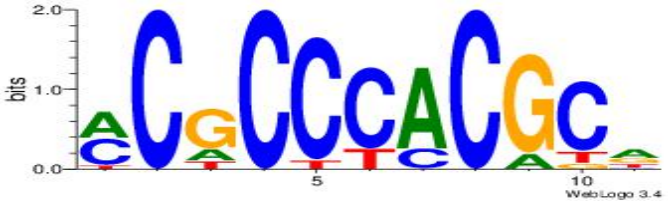
Motif ID:	44
Motif name:	Egr1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.05952

Alignment:

```
YCGCCCACGCH
VVTCCCCCTVV
```

Original motif Consensus sequence: HGCGTGGGCGK

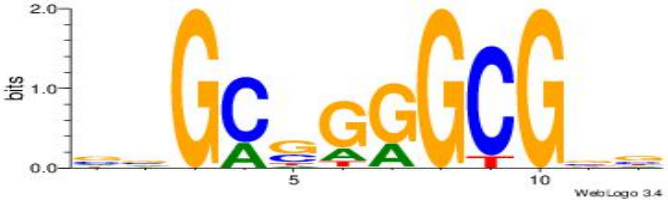
Reverse complement motif Consensus sequence: YCGCCCACGCH



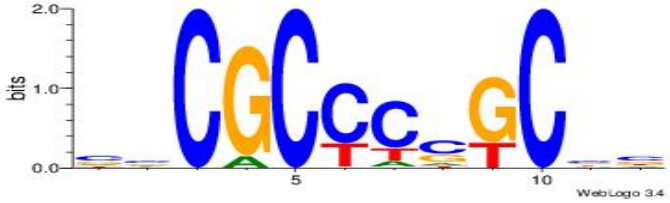
Dataset #:	4
Motif ID:	67
Motif name:	ssGMsGRGCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.0648994

Alignment:
VVGCSGGGCGBB
-VVAGGGGGAVV

Original motif Consensus sequence: VVGCSGGGCGBB



Reverse complement motif Consensus sequence: BBCGCCCSGCVV

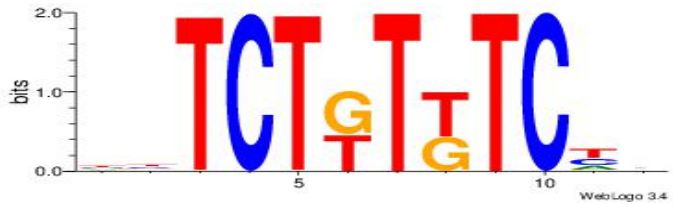


Dataset #:	4
Motif ID:	92
Motif name:	tyTCTkTkTCyy
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.0693142

Alignment:
BBTCTKTKTCHB
-VVTCCCCCTVV

Original motif Consensus sequence: BBTCTKTKTCHB

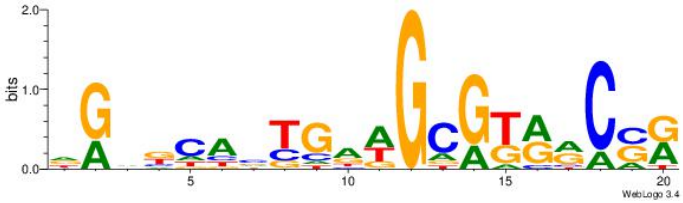
Reverse complement motif Consensus sequence: VHGARAYAGAVV



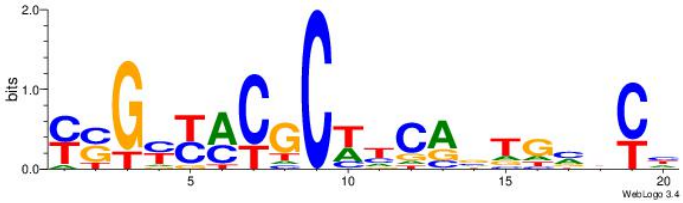
Dataset #: 3
Motif ID: 61
Motif name: Pax5
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 9
Number of overlap: 11
Similarity score: 0.0697139

Alignment:
DGVBCABTGDWGCGKRRCSR
--------VVAGGGGGAVV-

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR



Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD



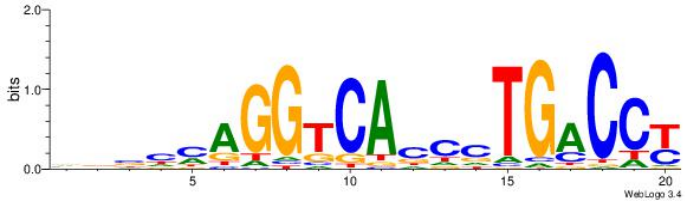
Dataset #: 3

Motif ID:	45
Motif name:	ESR1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.0713568

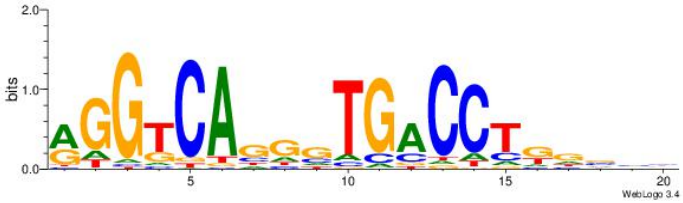
Alignment:

```
VDBHMAGGTCACCCTGACCY
--VVAGGGGGAVV-------
```

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY

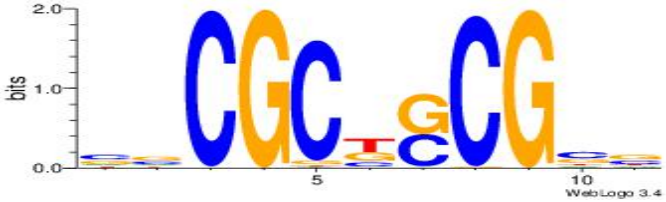


Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV

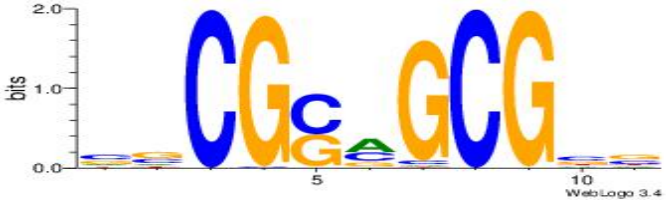


Dataset #: 4 Motif ID: 94 Motif name: ssCGCksCGss

Original motif Consensus sequence: VVCGCKSCGBB



Reverse complement motif Consensus sequence: BBCGSRGCGVV



Best Matches for Motif ID 94 (Highest to Lowest)

Dataset #:	4
Motif ID:	72
Motif name:	ssCKCwsCGss
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

Alignment:
BVCGCWSCGBV
VVCGCKSCGBB

Original motif Consensus sequence: BVCGCWSCGBV

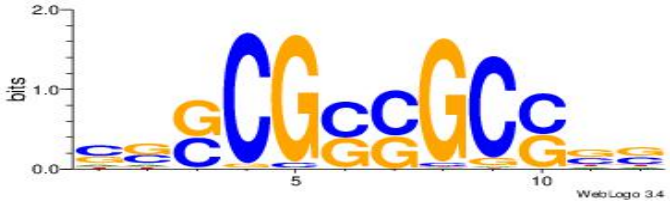
Reverse complement motif Consensus sequence: VBCGSWGCGVB

Dataset #:	4
Motif ID:	78
Motif name:	sssCGssGCsss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement

Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.0076298

Alignment:
SSSGCSSCGSSS
-VVCGCKSCGBB

Original motif Consensus sequence: SSSCGSSGCSSS



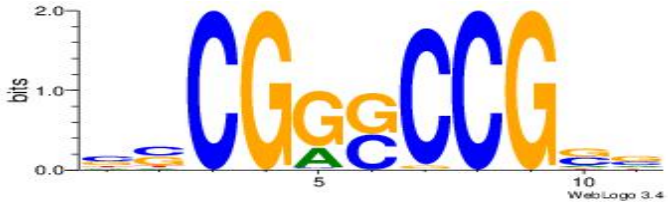
Reverse complement motif Consensus sequence: SSSGCSSCGSSS

Dataset #:	4
Motif ID:	87
Motif name:	ssCGGsYCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0169077

Alignment:
VSCGGSCCGSB
VVCGCKSCGBB

Original motif Consensus sequence: BSCGGSCCGSV

Reverse complement motif Consensus sequence: VSCGGSCCGSB

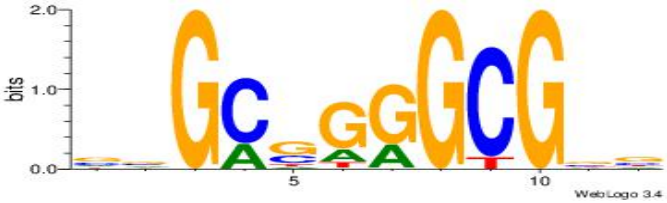


Dataset #:	4
Motif ID:	67
Motif name:	ssGMsGRGCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.0276374

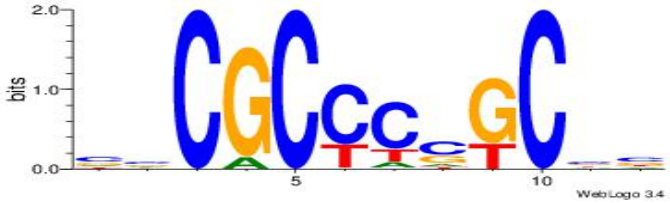
Alignment:

```
BBCGCCCSGCVV
-VVCGCKSCGBB
```

Original motif Consensus sequence: VVGCSGGGCGBB



Reverse complement motif Consensus sequence: BBCGCCCSGCVV

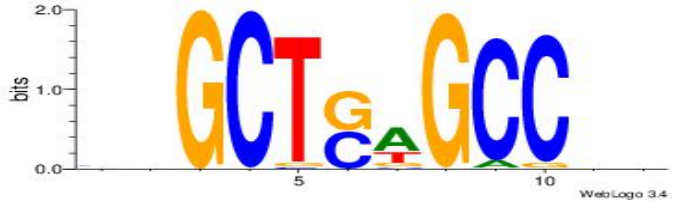


Dataset #:	4
Motif ID:	77
Motif name:	ssGCTswGCCms
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.0456402

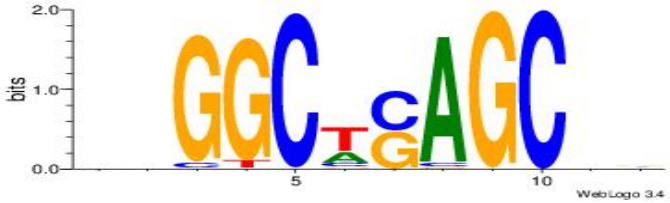
Alignment:

```
BDGGCTSAGCBV
-VVCGCKSCGBB
```

Original motif Consensus sequence: VBGCTSAGCCHB



Reverse complement motif Consensus sequence: BDGGCTSAGCBV

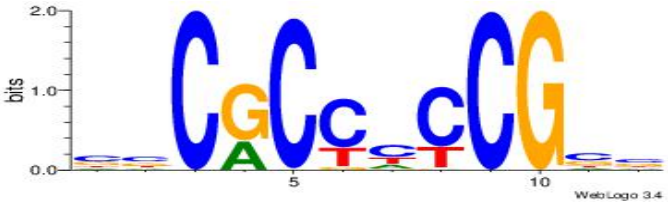


Dataset #:	4
Motif ID:	88
Motif name:	ssCrCYyYCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	11

Similarity score: 0.0497808

Alignment:
BBCRCCYCCGBB
VVCGCKSCGBB-

Original motif Consensus sequence: BBCRCCYCCGBB



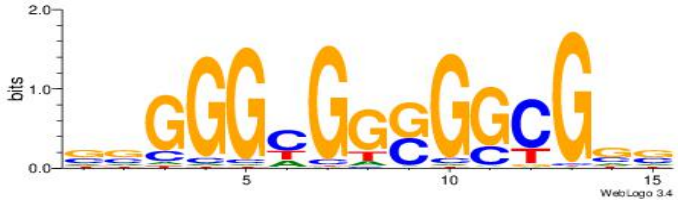
Reverse complement motif Consensus sequence: BBCGGKGGMGBB

Dataset #: 4
Motif ID: 91
Motif name: ssCGCCsCCrCCCss
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 5
Number of overlap: 11
Similarity score: 0.0512927

Alignment:
SSGGGCGGSGGCGSS
----BBCGSRGCGVV

Original motif Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif Consensus sequence: SSGGGCGGSGGCGSS

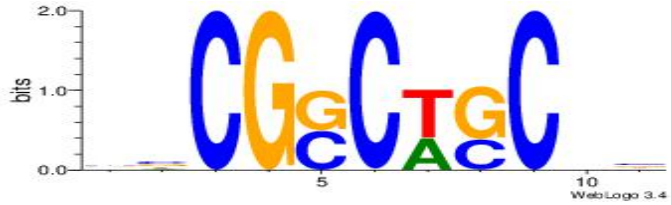


Dataset #:	4
Motif ID:	90
Motif name:	ssCGsCwsCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.0518867

Alignment:

```
BBCGSCWSCBB
BBCGSRGCGVV
```

Original motif Consensus sequence: BBCGSCWSCBB



Reverse complement motif Consensus sequence: BBGSWGSCGBB

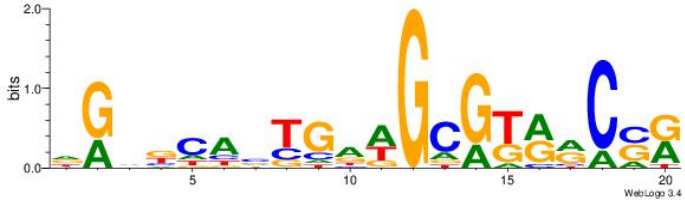
Dataset #:	3
Motif ID:	61

Motif name:	Pax5
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	11
Similarity score:	0.0612549

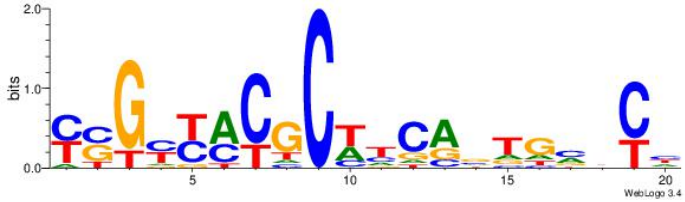
Alignment:

```
MSGKKRCGCWDCABTGBBCD
-----VVCGCKSCGBB----
```

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR



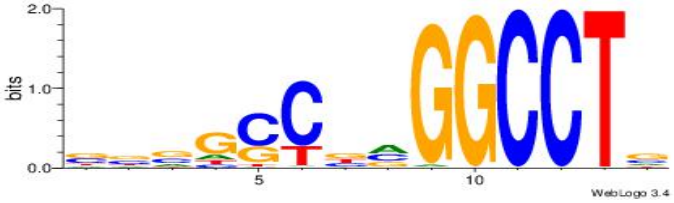
Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD



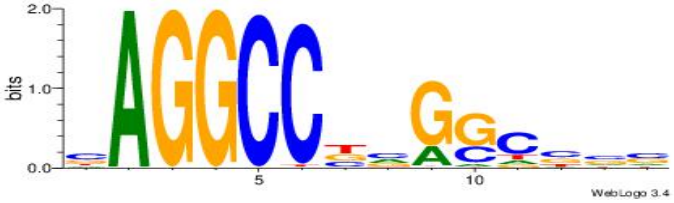
Dataset #:	3
Motif ID:	28
Motif name:	Zfx
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	11
Similarity score:	0.0677552

Alignment:
BBVGCCBVGGCCTV
---BBCGSRGCGVV

Original motif Consensus sequence: BBVGCCBVGGCCTV

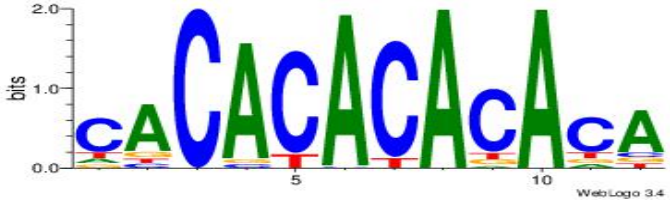


Reverse complement motif Consensus sequence: VAGGCCBBGGCVB

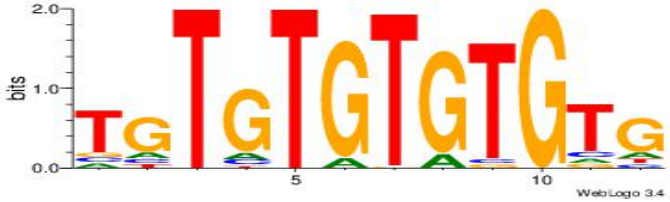


Dataset #: 4 Motif ID: 95 Motif name: CACACACACACA

Original motif Consensus sequence: CACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTG



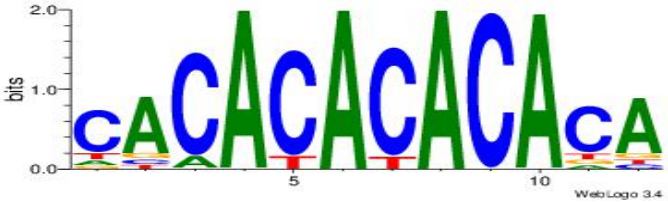
Best Matches for Motif ID 95 (Highest to Lowest)

Dataset #:	4
Motif ID:	79
Motif name:	CACACACACACA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1

Number of overlap: 12
Similarity score: 0

Alignment:
CACACACACACA
CACACACACACA

Original motif Consensus sequence: CACACACACACA



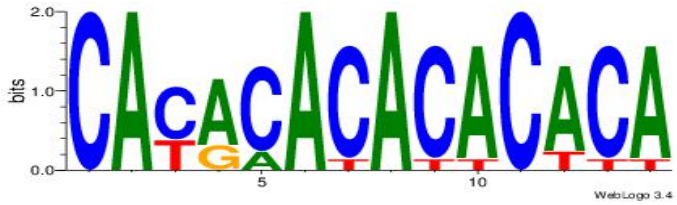
Reverse complement motif Consensus sequence: TGTGTGTGTGTG

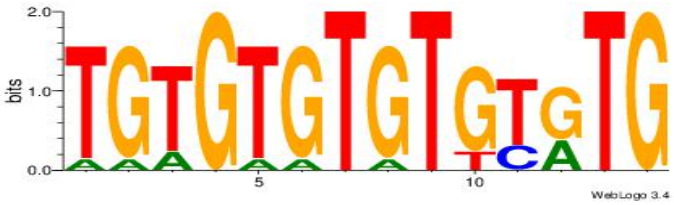
Dataset #: 2
Motif ID: 27
Motif name: Motif 27
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 3
Number of overlap: 12
Similarity score: 0.0205118

Alignment:
TGTGTGTGTGTKTG
TGTGTGTGTGTG--

Original motif Consensus sequence: CAYACACACACACA

Reverse complement motif Consensus sequence: TGTGTGTGTGTKT





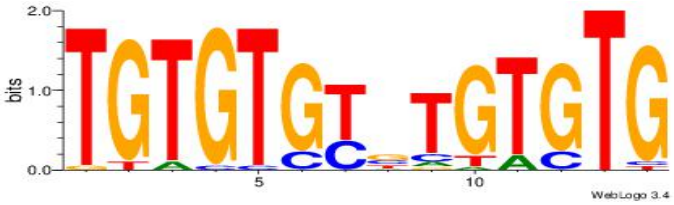
Dataset #:	2
Motif ID:	25
Motif name:	Motif 25
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	12
Similarity score:	0.0385589

Alignment:

```
CACACAVRCACACA
--CACACACACACA
```

Original motif Consensus sequence: CACACAVRCACACA

Reverse complement motif Consensus sequence: TGTGTGKVTGTGT



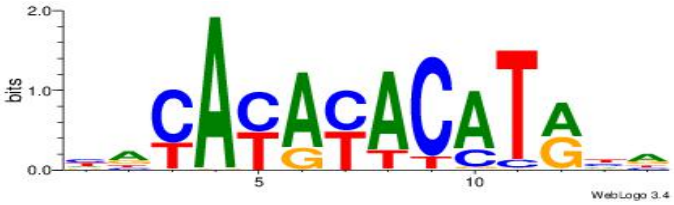
Dataset #:	4
Motif ID:	75

Motif name:	yayAyAyACATrya
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:	0.0642933

Alignment:

```
HACAYAYACATRHD
CACACACACACA--
```

Original motif Consensus sequence: HACAYAYACATRHD

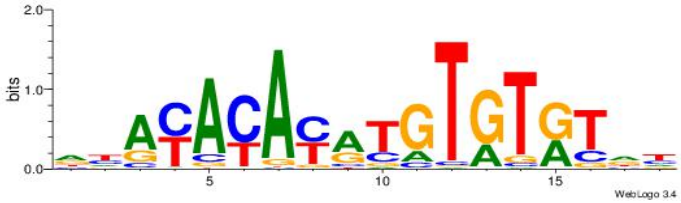


Reverse complement motif Consensus sequence: DHKATGTKTKTGT

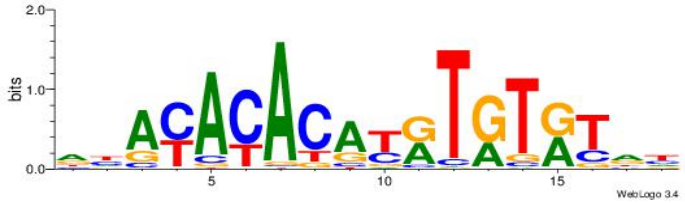
Dataset #:	4
Motif ID:	97
Motif name:	ryayAyAyrtGTRTrTry
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	12
Similarity score:	0.0802145

Alignment:
DHAYAYAYRTGTGTRTDH
-----TGTGTGTGTGTG-

Original motif Consensus sequence: DHAYAYAYRTGTGTRTDH



Reverse complement motif Consensus sequence: HDAMACACAKKTKTKTHD

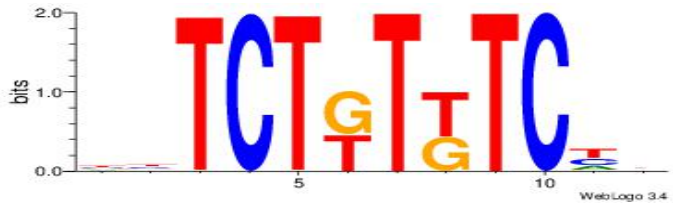


Dataset #:	4
Motif ID:	92
Motif name:	tyTCTkTkTCyy
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.0817886

Alignment:
VHGARAYAGAVV
CACACACACACA

Original motif Consensus sequence: BBTCTKTKTCHB

Reverse complement motif Consensus sequence: VHGARAYAGAVV

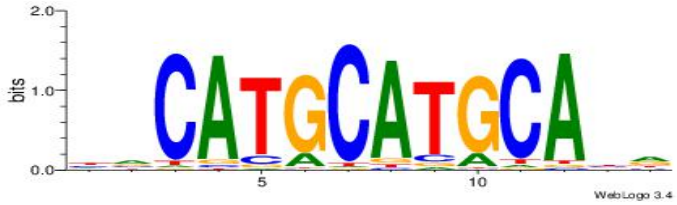


Dataset #:	4
Motif ID:	101
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.0838132

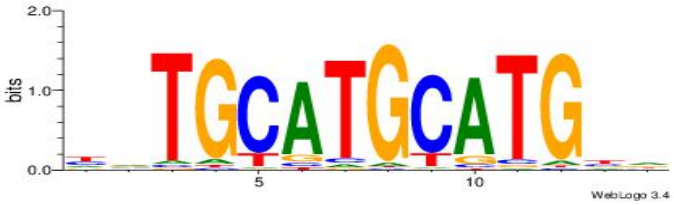
Alignment:

```
HVCATGCATGCABD
CACACACACACA--
```

Original motif Consensus sequence: HVCATGCATGCABD



Reverse complement motif Consensus sequence: DVTGCATGCATGB



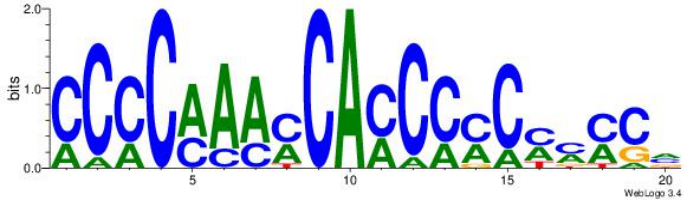
Dataset #:	3
Motif ID:	34

Motif name:	RREB1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	12
Similarity score:	0.0893611

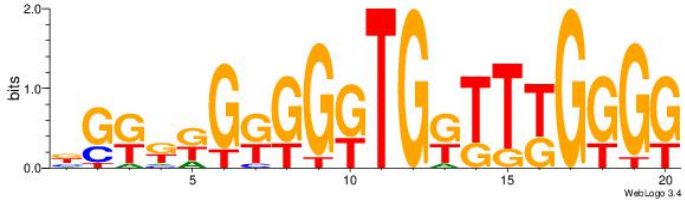
Alignment:

```
CCCCMAAMCAMCCMCMMMCV
------CACACACACACA--
```

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV



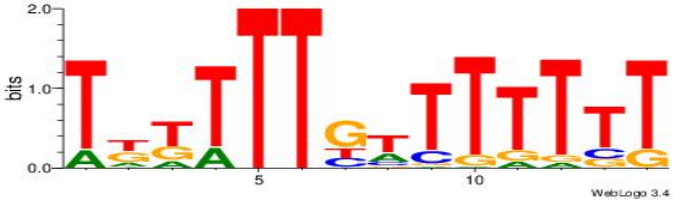
Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG



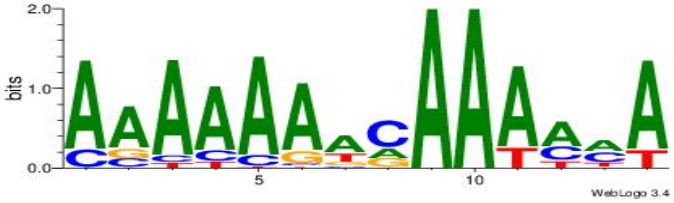
Dataset #:	2
Motif ID:	26
Motif name:	Motif 26
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	12
Similarity score:	0.098214

Alignment:
AAAAAAACAAARRA
-CACACACACACA-

Original motif Consensus sequence: TKKTTTGTTTTTTT



Reverse complement motif Consensus sequence: AAAAAAACAAARR

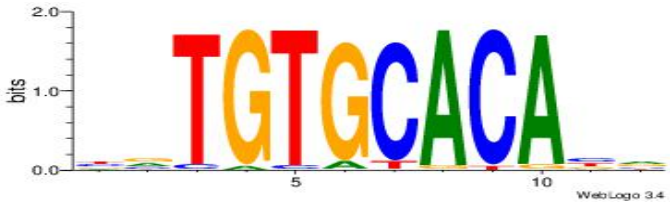


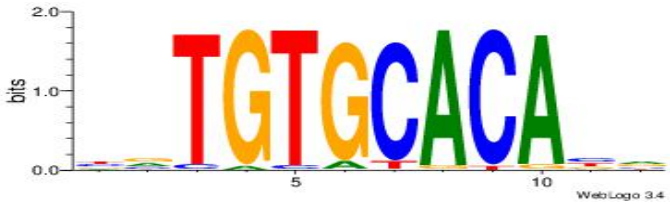
Dataset #:	4
Motif ID:	96
Motif name:	yrTGTGCACAyr
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.100025

Alignment:
BVTGTGCACABV
CACACACACACA

Original motif Consensus sequence: BVTGTGCACABV

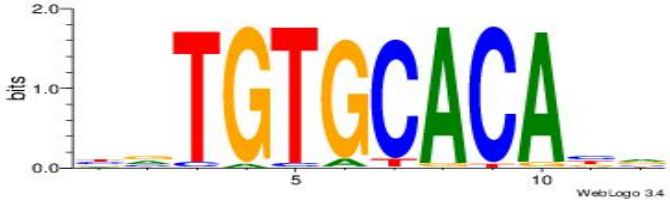
Reverse complement motif Consensus sequence: BBTGTGCACAVV



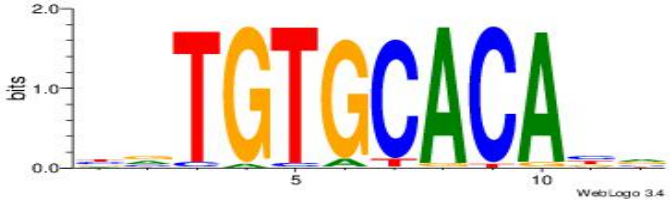


Dataset #: 4 Motif ID: 96 Motif name: yrTGTGCACAyr

Original motif Consensus sequence: BVTGTGCACABV



Reverse complement motif Consensus sequence: BBTGTGCACAVV



Best Matches for Motif ID 96 (Highest to Lowest)

Dataset #:	4
Motif ID:	100
Motif name:	wrTGTATACAyw
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.0122182

Alignment:

```
HDTGTATACAHD
BVTGTGCACABV
```

Original motif Consensus sequence: HDTGTATACAHD

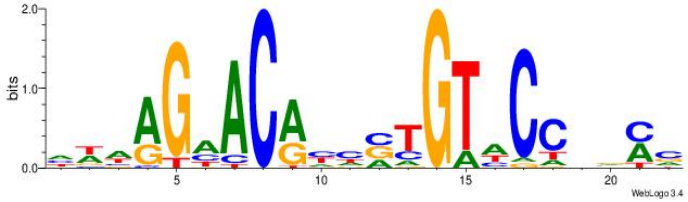
Reverse complement motif Consensus sequence: DHTGTATACADH

Dataset #:	3
Motif ID:	40
Motif name:	Ar
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:	0.0509564

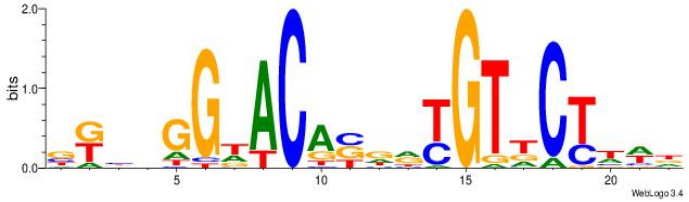
Alignment:

```
HWDAGHACRHHVTGTHCCHVMV
BBTGTGCACAVV----------
```

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH



Dataset #:	4
Motif ID:	75
Motif name:	yayAyAyACATrya
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	12
Similarity score:	0.0535005

Alignment:

```
HACAYAYACATRHD
BVTGTGCACABV--
```

Original motif Consensus sequence: HACAYAYACATRHD

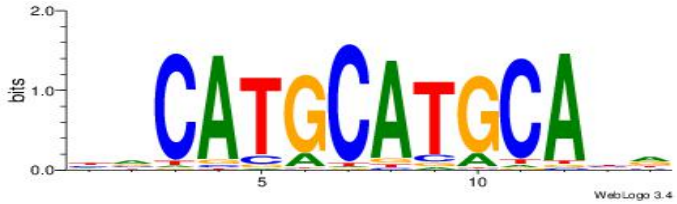
Reverse complement motif Consensus sequence: DHKATGTKTKTGT

Dataset #:	4
Motif ID:	101
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	12

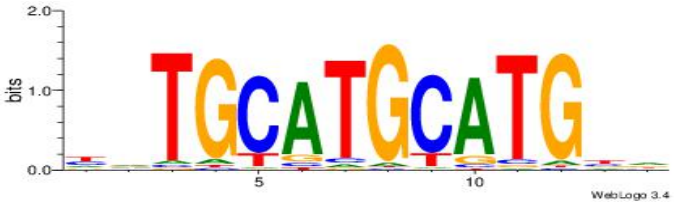
Similarity score: 0.0598757

Alignment:
HVCATGCATGCABD
BVTGTGCACABV--

Original motif Consensus sequence: HVCATGCATGCABD



Reverse complement motif Consensus sequence: DVTGCATGCATGB

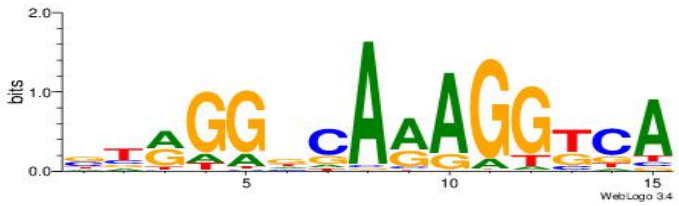


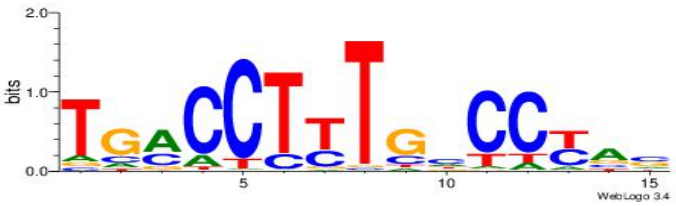
Dataset #: 3
Motif ID: 36
Motif name: PPARGRXRA
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 4
Number of overlap: 12
Similarity score: 0.0627131

Alignment:
TGRCCTKTGHCCKAB
---BBTGTGCACAVV

Original motif Consensus sequence: BTRGGDCARAGGKCA

Reverse complement motif Consensus sequence: TGRCCTKTGHCCK



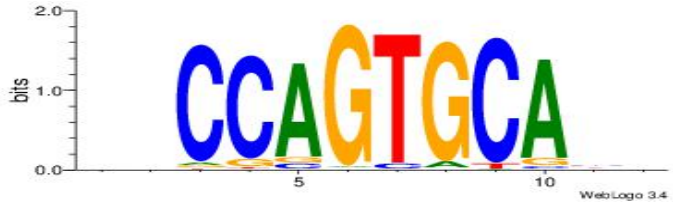


Dataset #:	4
Motif ID:	103
Motif name:	ccCCAGTGCAbr
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.065528

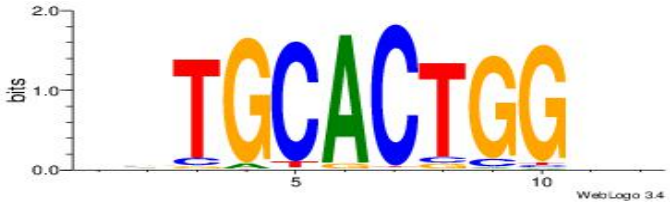
Alignment:

```
HVCCAGTGCABD
BVTGTGCACABV
```

Original motif Consensus sequence: HVCCAGTGCABD



Reverse complement motif Consensus sequence: DBTGCACTGGVD



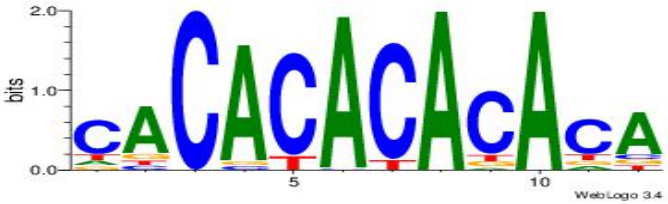
Dataset #:	4
Motif ID:	95

Motif name:	CACACACACACA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.0658006

Alignment:

```
CACACACACACA
BVTGTGCACABV
```

Original motif Consensus sequence: CACACACACACA

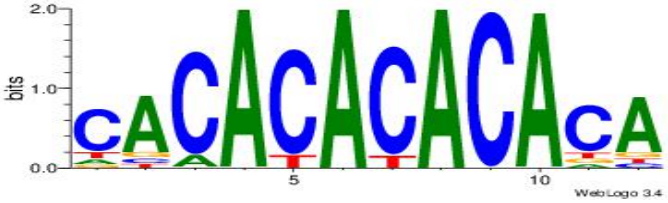


Reverse complement motif Consensus sequence: TGTGTGTGTGTG

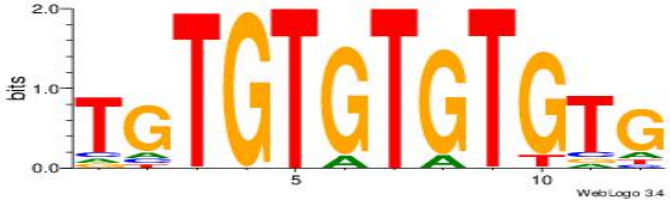
Dataset #:	4
Motif ID:	79
Motif name:	CACACACACACA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.0678445

Alignment:
CACACACACACA
BVTGTGCACABV

Original motif Consensus sequence: CACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTG

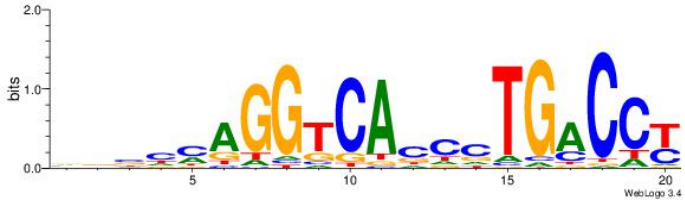


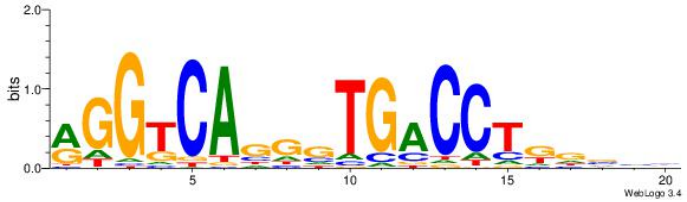
Dataset #:	3
Motif ID:	45
Motif name:	ESR1
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	8
Number of overlap:	12
Similarity score:	0.0683806

Alignment:
MGGTCAGGGTGACCTRDBHV
-BVTGTGCACABV-------

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY

Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV



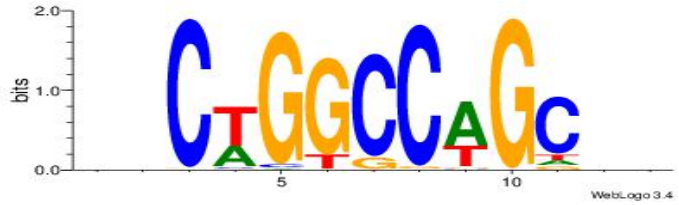


Dataset #:	4
Motif ID:	80
Motif name:	ssCwGGCCwGCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	12
Similarity score:	0.0730906

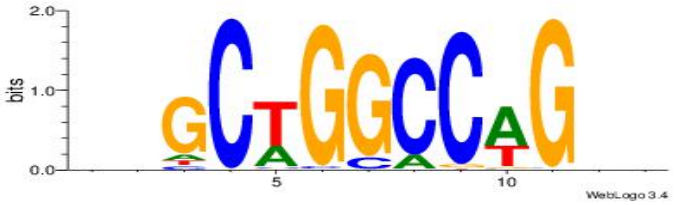
Alignment:

```
BBCWGGCCAGCBB
-BVTGTGCACABV
```

Original motif Consensus sequence: BBCWGGCCAGCBB

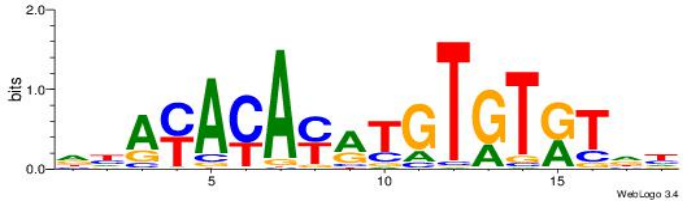


Reverse complement motif Consensus sequence: BBGCTGGCCWGBI

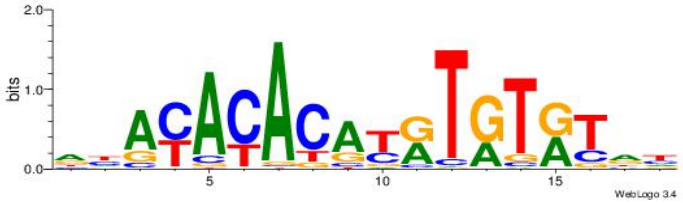


Dataset #: 4 Motif ID: 97 Motif name: ryayAyAyrtGTRTrTry

Original motif Consensus sequence: DHAYAYAYRTGTGTRTDH



Reverse complement motif Consensus sequence: HDAMACACAKKTKTKTHD



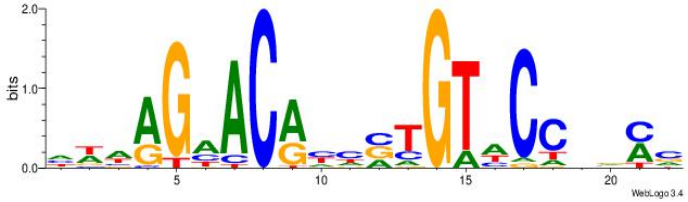
Best Matches for Motif ID 97 (Highest to Lowest)

Dataset #:	3
Motif ID:	40
Motif name:	Ar
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	18
Similarity score:	0.0567857

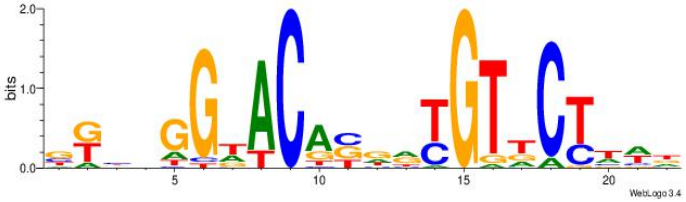
Alignment:

```
VRVDGGHACAVDDKGTHCTDWH
---HDAMACACAKKTKTKTHD-
```

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH

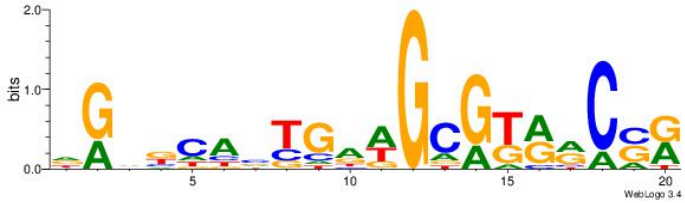


Dataset #:	3
Motif ID:	61
Motif name:	Pax5
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	18
Similarity score:	0.0640097

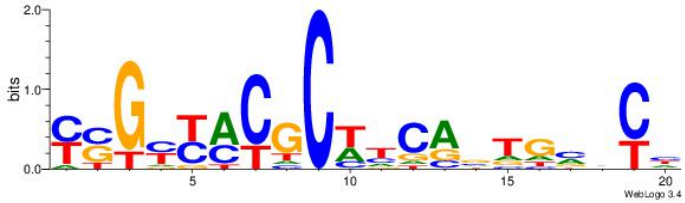
Alignment:

```
DGVBCABTGDWGCGKRRCSR
-DHAYAYAYRTGTGTRTDH-
```

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR



Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD

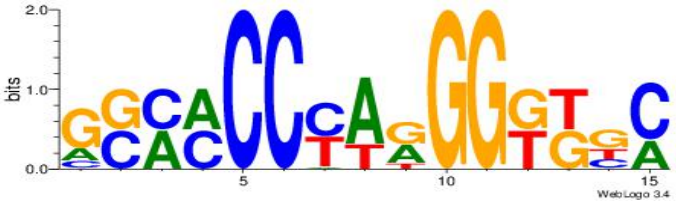


Dataset #:	3
Motif ID:	29
Motif name:	Zfp423
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward

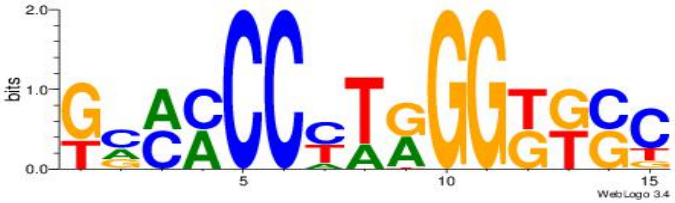
Position number: 1
Number of overlap: 15
Similarity score: 1.57612

Alignment:
GSMMCCYARGGKKKC---
HDAMACACAKKTKTKTHD

Original motif Consensus sequence: GSMMCCYARGGKKKC



Reverse complement motif Consensus sequence: GYRYCCMTKGGYR

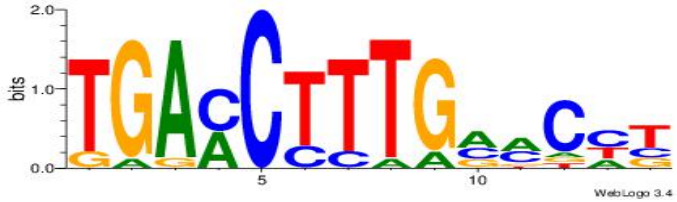


Dataset #: 3
Motif ID: 38
Motif name: NR2F1
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 1
Number of overlap: 14
Similarity score: 2.07113

Alignment:
AKGYYCAAAGRTCA----
HDAMACACAKKTKTKTHD

Original motif Consensus sequence: TGAMCTTTGMMCYT

Reverse complement motif Consensus sequence: AKGYYCAAAGRTC

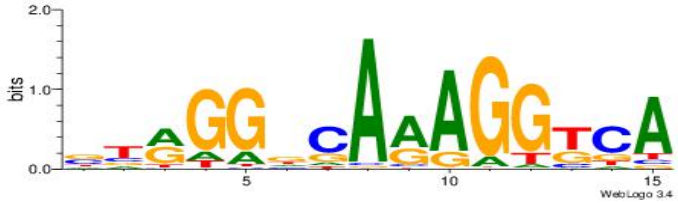


Dataset #:	3
Motif ID:	36
Motif name:	PPARGRXRA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	2.07717

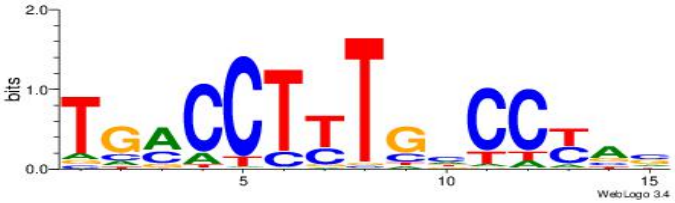
Alignment:

```
----TGRCCTKTGHCCKAB
HDAMACACAKKTKTKTHD-
```

Original motif Consensus sequence: BTRGGDCARAGGKCA



Reverse complement motif Consensus sequence: TGRCCTKTGHCCK



Dataset #:	4

Motif ID:	75
Motif name:	yayAyAyACATrya
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	13
Similarity score:	2.52342

Alignment:

```
HACAYAYACATRHD-----
-DHAYAYAYRTGTGTRTDH
```

Original motif Consensus sequence: HACAYAYACATRHD

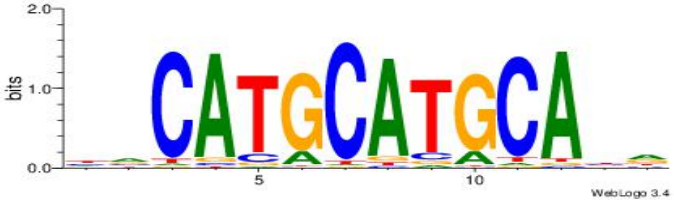
Reverse complement motif Consensus sequence: DHKATGTKTKTGT

Dataset #:	4
Motif ID:	101
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	13
Similarity score:	2.5527

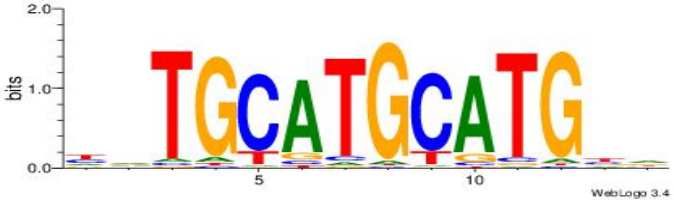
Alignment:

```
-----HVCATGCATGCABD
DHAYAYAYRTGTGTRTDH-
```

Original motif Consensus sequence: HVCATGCATGCABD



Reverse complement motif Consensus sequence: DVTGCATGCATGB



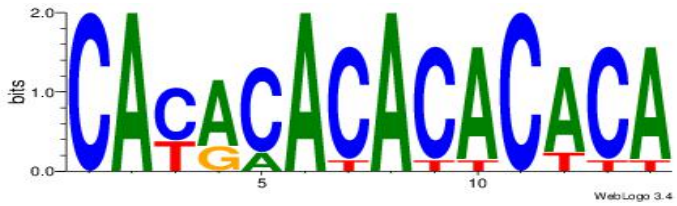
Dataset #:	2
Motif ID:	27
Motif name:	Motif 27
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	13
Similarity score:	2.55729

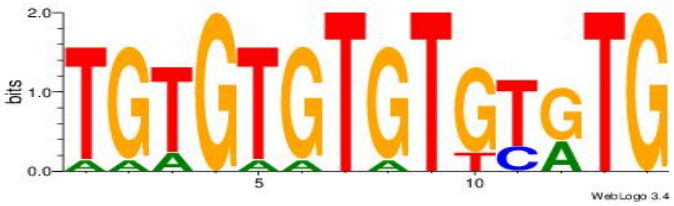
Alignment:

```
-----CAYACACACACACA
HDAMACACAKKTKTKTHD-
```

Original motif Consensus sequence: CAYACACACACACA

Reverse complement motif Consensus sequence: TGTGTGTGTGTKT





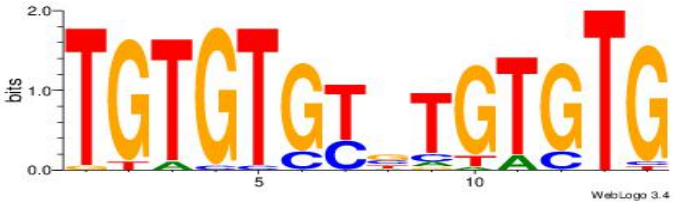
Dataset #:	2
Motif ID:	25
Motif name:	Motif 25
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	13
Similarity score:	2.56171

Alignment:

```
-----CACACAVRCACACA
HDAMACACAKKTKTKTHD-
```

Original motif Consensus sequence: CACACAVRCACACA

Reverse complement motif Consensus sequence: TGTGTGKVTGTGT



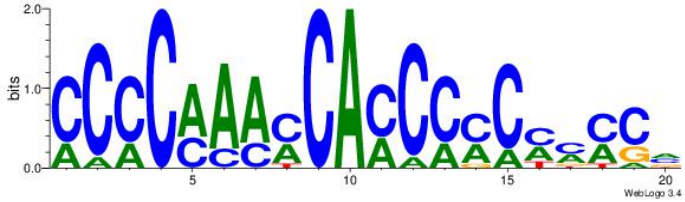
Dataset #:	3
Motif ID:	34

Motif name:	RREB1
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	8
Number of overlap:	13
Similarity score:	2.57744

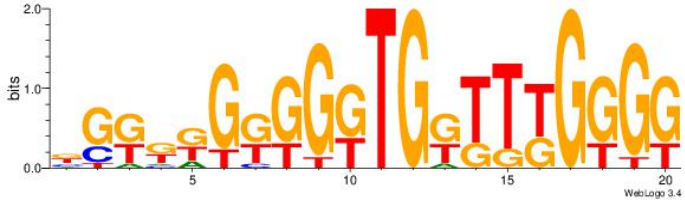
Alignment:

```
-----CCCCMAAMCAMCCMCMMMCV
HDAMACACAKKTKTKTHD-------
```

Original motif Consensus sequence: CCCCMAAMCAMCCMCMMMCV

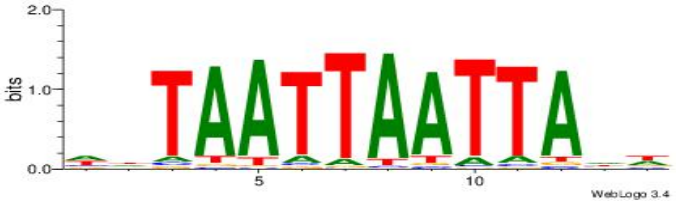


Reverse complement motif Consensus sequence: BGRRRGRGGRTGRTTYGGGG

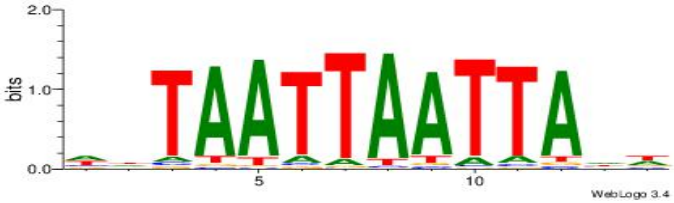


Dataset #: 4 Motif ID: 98 Motif name: wwTAATTAATTAww

Original motif Consensus sequence: HDTAATTAATTAHD



Reverse complement motif Consensus sequence: DHTAATTAATTADH



Best Matches for Motif ID 98 (Highest to Lowest)

Dataset #:	4
Motif ID:	75
Motif name:	yayAyAyACATrya
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:	0.0386482

Alignment:
HACAYAYACATRHD
HDTAATTAATTAHD

Original motif Consensus sequence: HACAYAYACATRHD

Reverse complement motif Consensus sequence: DHKATGTKTKTGT

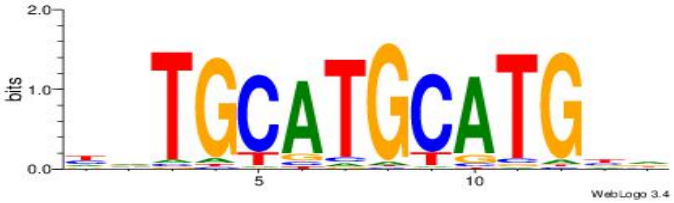
Dataset #:	4
Motif ID:	101
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement

Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0492995

Alignment:
DVTGCATGCATGBH
DHTAATTAATTADH

Original motif Consensus sequence: HVCATGCATGCABD

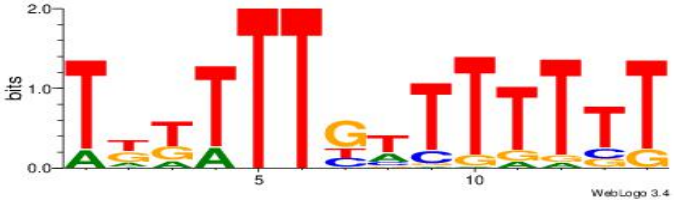
Reverse complement motif Consensus sequence: DVTGCATGCATGB



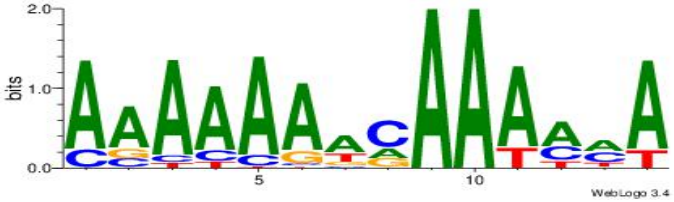
Dataset #:	2
Motif ID:	26
Motif name:	Motif 26
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	13
Similarity score:	0.540688

Alignment:
AAAAAAACAAARRA-
-DHTAATTAATTADH

Original motif Consensus sequence: TKKTTTGTTTTTTT



Reverse complement motif Consensus sequence: AAAAAAACAAARR



Dataset #:	4
Motif ID:	100
Motif name:	wrTGTATACAyw
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:	1.04123

Alignment:

```
HDTGTATACAHD--
HDTAATTAATTAHD
```

Original motif Consensus sequence: HDTGTATACAHD

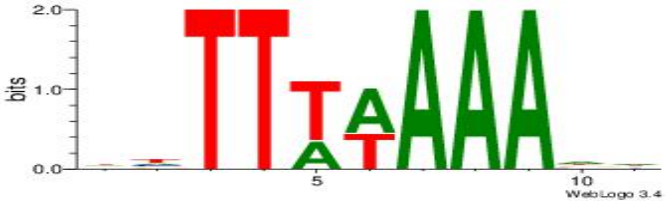
Reverse complement motif Consensus sequence: DHTGTATACADH

Dataset #:	4
Motif ID:	104
Motif name:	wtTTWwAAAaw
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	1.53128

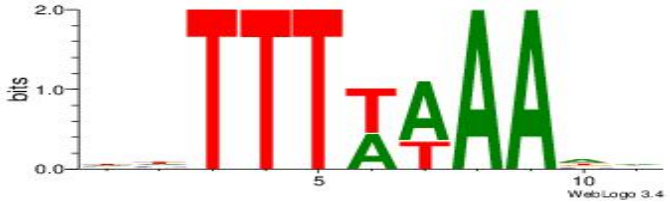
Alignment:

```
DDTTTWAAAHH---
HDTAATTAATTAHD
```

Original motif Consensus sequence: HHTTTWAAADD



Reverse complement motif Consensus sequence: DDTTTWAAAHH

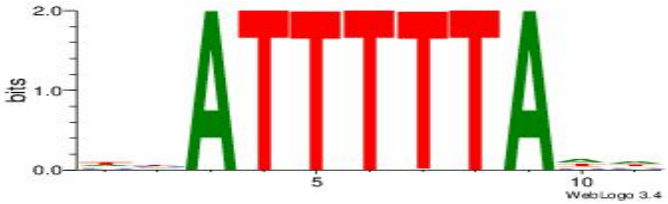


Dataset #:	4
Motif ID:	85
Motif name:	wtATTTTTAww
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	11

Similarity score: 1.53238

Alignment:
DHATTTTTADD---
DHTAATTAATTADH

Original motif Consensus sequence: DHATTTTTADD



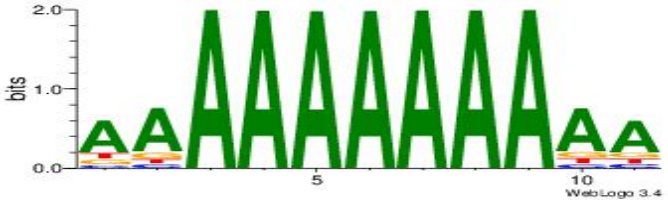
Reverse complement motif Consensus sequence: DDTAAAAATHD

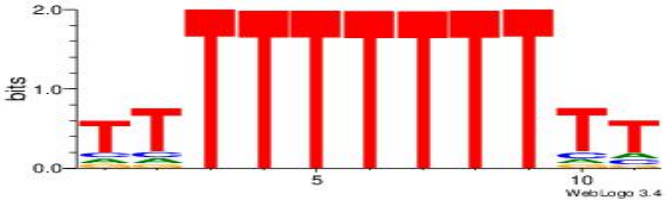
Dataset #: 4
Motif ID: 102
Motif name: AAAAAAAAAAA
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 1
Number of overlap: 11
Similarity score: 1.54293

Alignment:
---AAAAAAAAAAA
HDTAATTAATTAHD

Original motif Consensus sequence: AAAAAAAAAAA

Reverse complement motif Consensus sequence: TTTTTTTTTTT





Dataset #:	4
Motif ID:	83
Motif name:	wwTAAAwAww
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	2

Alignment:

```
----DDTAAAWAHH
HDTAATTAATTAHD
```

Original motif Consensus sequence: DDTAAAWAHH

Reverse complement motif Consensus sequence: HHTWTTTADD

Dataset #:	4
Motif ID:	81

Motif name:	wwTAAwAAww
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	2.00262

Alignment:

```
----DDTAAWAAHH
HDTAATTAATTAHD
```

Original motif Consensus sequence: DDTAAWAAHH

Reverse complement motif Consensus sequence: HHTTWTTADD

Dataset #:	4
Motif ID:	74
Motif name:	twTACATAvw
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	2.02175

Alignment:
DBTATGTAHH----
HDTAATTAATTAHD

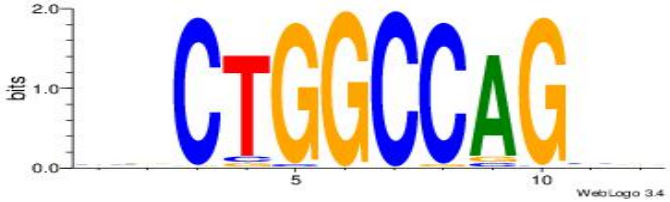
Original motif Consensus sequence: HHTACATAVD

Reverse complement motif Consensus sequence: DBTATGTAHH

Dataset #: 4 Motif ID: 99 Motif name: sgCTGGCCAGcs

Original motif Consensus sequence: BBCTGGCCAGVV

Reverse complement motif Consensus sequence: VVCTGGCCAGBB



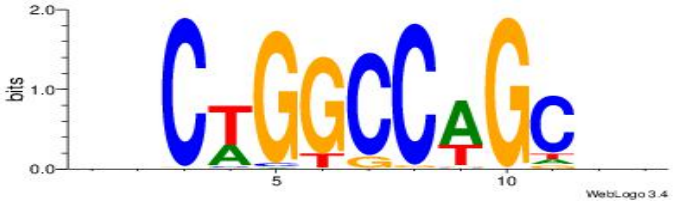
Best Matches for Motif ID 99 (Highest to Lowest)

Dataset #:	4
Motif ID:	80
Motif name:	ssCwGGCCwGCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1

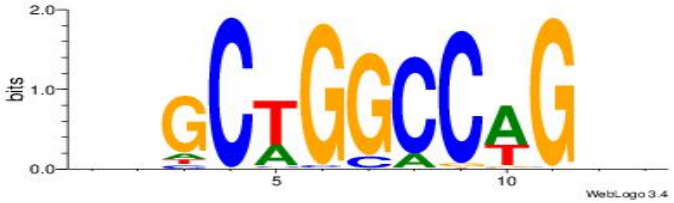
Number of overlap: 12
Similarity score: 0

Alignment:
BBGCTGGCCWGBB
-VVCTGGCCAGBB

Original motif Consensus sequence: BBCWGGCCAGCBB



Reverse complement motif Consensus sequence: BBGCTGGCCWGBI

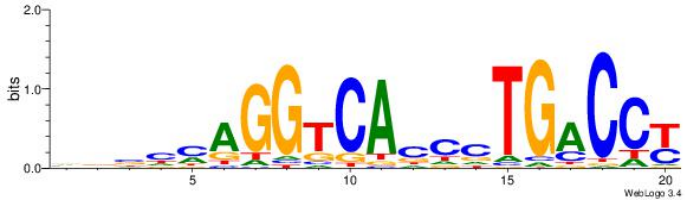


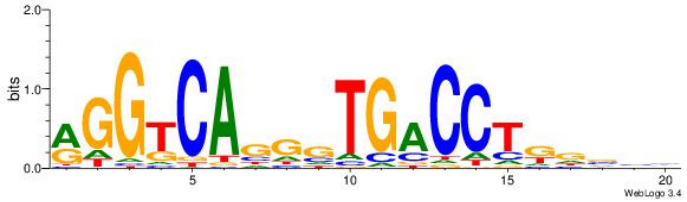
Dataset #: 3
Motif ID: 45
Motif name: ESR1
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 7
Number of overlap: 12
Similarity score: 0.0561158

Alignment:
MGGTCAGGGTGACCTRDBHV
------VVCTGGCCAGBB--

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY

Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV



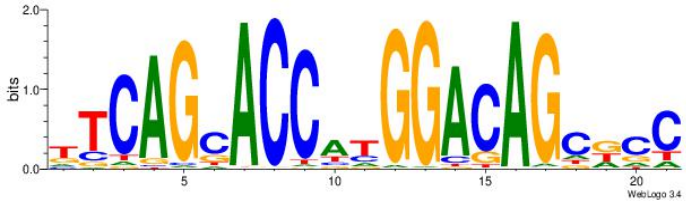


Dataset #:	3
Motif ID:	35
Motif name:	REST
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8
Number of overlap:	12
Similarity score:	0.0580329

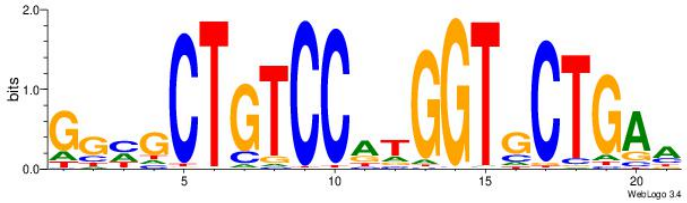
Alignment:

```
TTCAGCACCATGGACAGCKCC
-------BBCTGGCCAGVV--
```

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC



Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA



Dataset #:	4

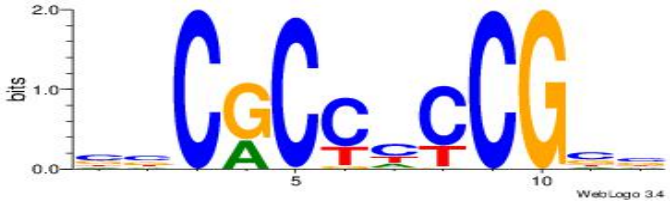
Motif ID:	88
Motif name:	ssCrCYyYCGss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.0691833

Alignment:

BBCGGKGGMGBB

VVCTGGCCAGBB

Original motif Consensus sequence: BBCRCCYCCGBB

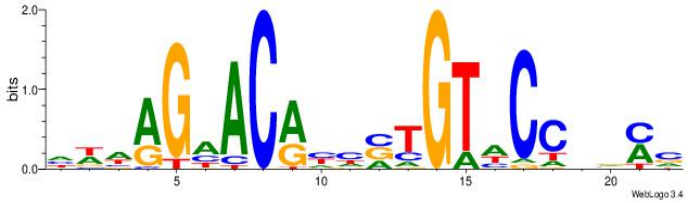


Reverse complement motif Consensus sequence: BBCGGKGGMGBB

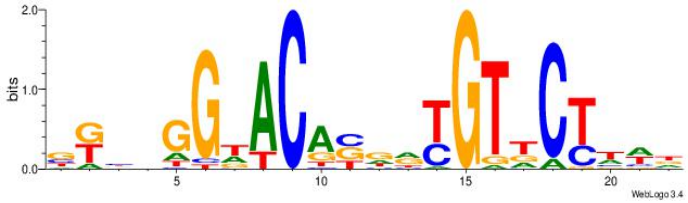
Dataset #:	3
Motif ID:	40
Motif name:	Ar
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	10
Number of overlap:	12
Similarity score:	0.0809423

Alignment:
HWDAGHACRHHVTGTHCCHVMV
---------BBCTGGCCAGVV-

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH

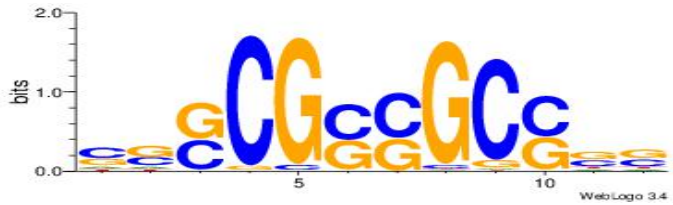


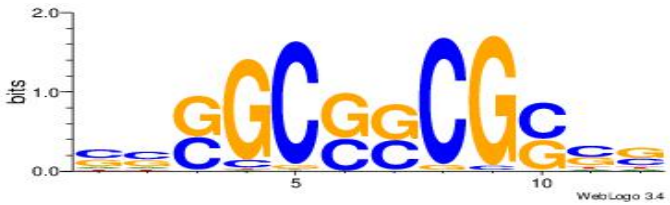
Dataset #:	4
Motif ID:	78
Motif name:	sssCGssGCsss
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.0853247

Alignment:
SSSCGSSGCSSS
BBCTGGCCAGVV

Original motif Consensus sequence: SSSCGSSGCSSS

Reverse complement motif Consensus sequence: SSSGCSSCGSSS



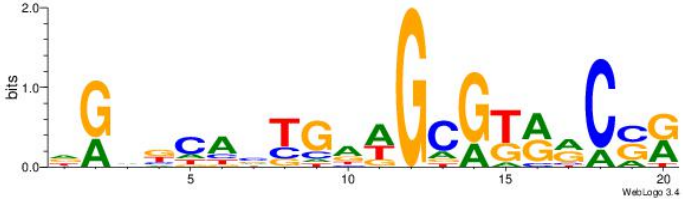


Dataset #:	3
Motif ID:	61
Motif name:	Pax5
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	12
Similarity score:	0.0865201

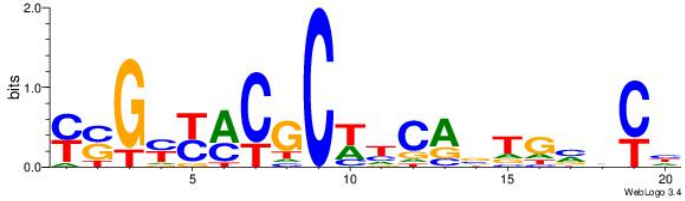
Alignment:

```
MSGKKRCGCWDCABTGBBCD
------VVCTGGCCAGBB--
```

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR



Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD



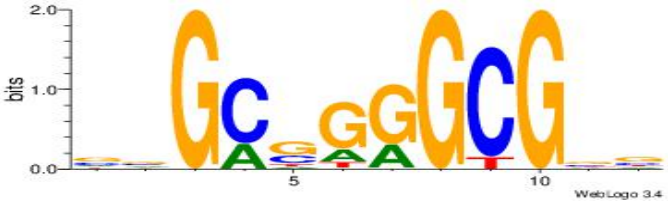
Dataset #: 4

Motif ID:	67
Motif name:	ssGMsGRGCGss
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:	0.0875502

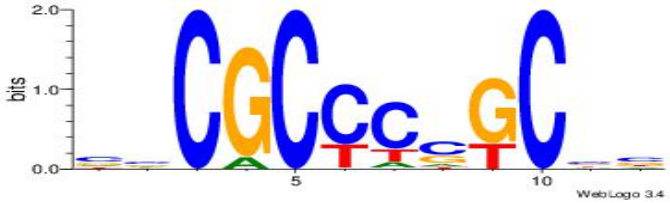
Alignment:

```
VVGCSGGGCGBB
VVCTGGCCAGBB
```

Original motif Consensus sequence: VVGCSGGGCGBB



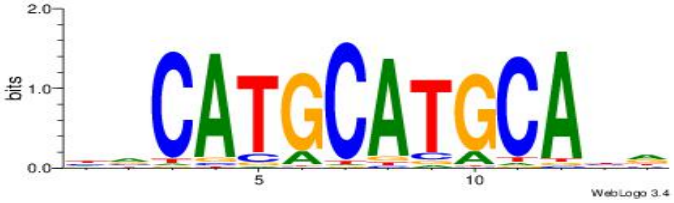
Reverse complement motif Consensus sequence: BBCGCCCSGCVV



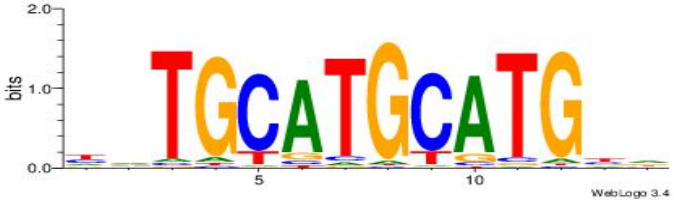
Dataset #:	4
Motif ID:	101
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.0885607

Alignment:
DVTGCATGCATGBH
--BBCTGGCCAGVV

Original motif Consensus sequence: HVCATGCATGCABD



Reverse complement motif Consensus sequence: DVTGCATGCATGB

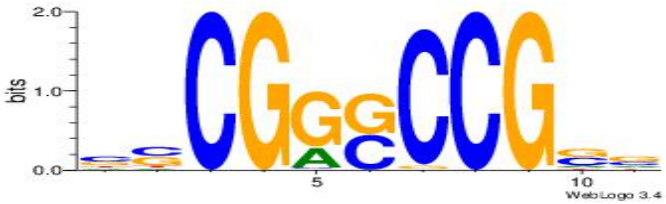


Dataset #:	4
Motif ID:	87
Motif name:	ssCGGsYCGss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.555159

Alignment:
-VSCGGSCCGSB
BBCTGGCCAGVV

Original motif Consensus sequence: BSCGGSCCGSV

Reverse complement motif Consensus sequence: VSCGGSCCGSB



Dataset #: 4 Motif ID: 100 Motif name: wrTGTATACAyw

Original motif Consensus sequence: HDTGTATACAHD

Reverse complement motif Consensus sequence: DHTGTATACADH

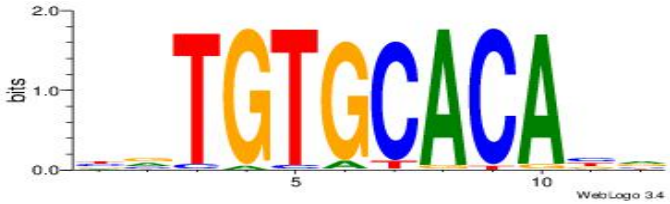
Best Matches for Motif ID 100 (Highest to Lowest)

Dataset #:	4
Motif ID:	96
Motif name:	yrTGTGCACAyr
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:	0.0107886

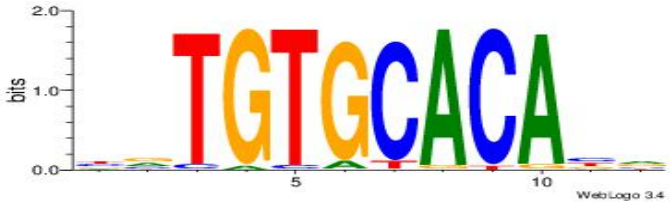
Alignment:

```
BVTGTGCACABV
HDTGTATACAHD
```

Original motif Consensus sequence: BVTGTGCACABV



Reverse complement motif Consensus sequence: BBTGTGCACAVV



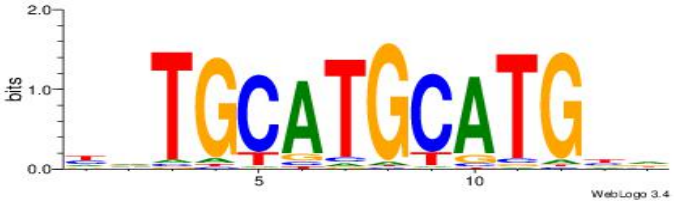
Dataset #:	4
Motif ID:	101
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.026179

Alignment:

```
HVCATGCATGCABD
--HDTGTATACAHD
```

Original motif Consensus sequence: HVCATGCATGCABD

Reverse complement motif Consensus sequence: DVTGCATGCATGB



Dataset #:	4
Motif ID:	75
Motif name:	yayAyAyACATrya
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:	0.0432442

Alignment:

```
HACAYAYACATRHD
HDTGTATACAHD--
```

Original motif Consensus sequence: HACAYAYACATRHD

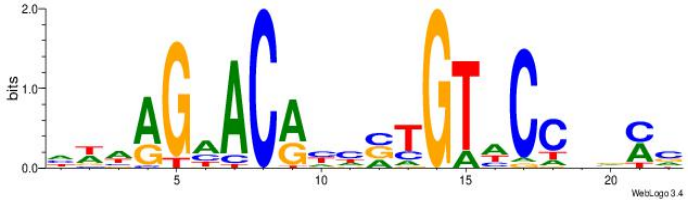
Reverse complement motif Consensus sequence: DHKATGTKTKTGT

Dataset #:	3
Motif ID:	40
Motif name:	Ar
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	9
Number of overlap:	12

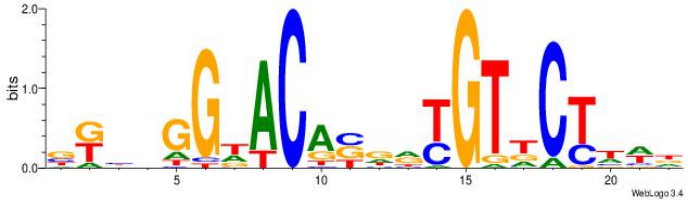
Similarity score: 0.0557046

Alignment:
VRVDGGHACAVDDKGTHCTDWH
--DHTGTATACADH--------

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH

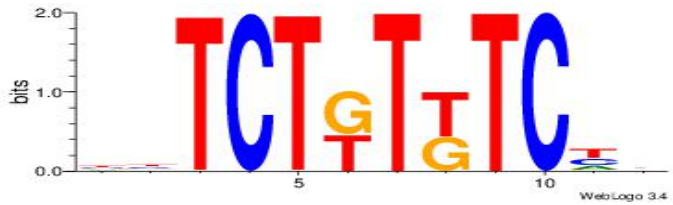


Dataset #: 4
Motif ID: 92
Motif name: tyTCTkTkTCyy
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 1
Number of overlap: 12
Similarity score: 0.0612523

Alignment:
BBTCTKTKTCHB
DHTGTATACADH

Original motif Consensus sequence: BBTCTKTKTCHB

Reverse complement motif Consensus sequence: VHGARAYAGAVV

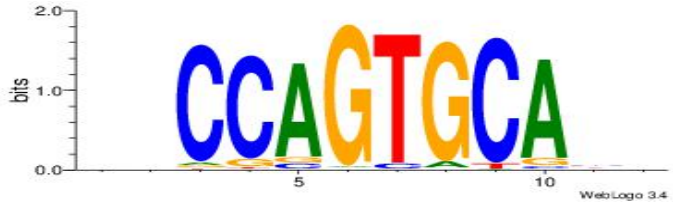


Dataset #:	4
Motif ID:	103
Motif name:	ccCCAGTGCAbr
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.0639471

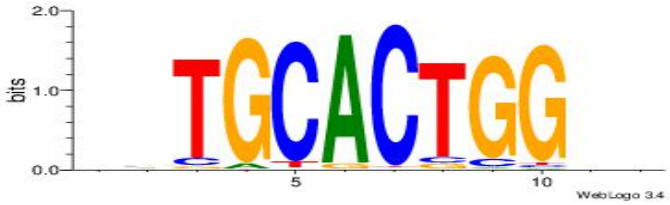
Alignment:

```
HVCCAGTGCABD
HDTGTATACAHD
```

Original motif Consensus sequence: HVCCAGTGCABD



Reverse complement motif Consensus sequence: DBTGCACTGGVD



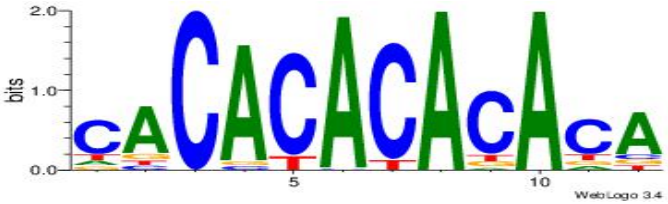
Dataset #:	4
Motif ID:	95

Motif name:	CACACACACACA
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:	0.0666592

Alignment:

```
CACACACACACA
HDTGTATACAHD
```

Original motif Consensus sequence: CACACACACACA

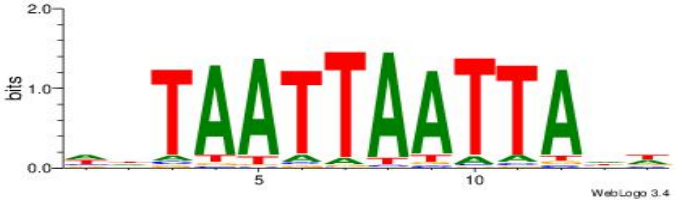


Reverse complement motif Consensus sequence: TGTGTGTGTGTG

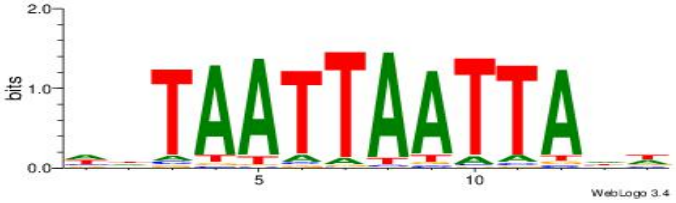
Dataset #:	4
Motif ID:	98
Motif name:	wwTAATTAATTAww
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	12
Similarity score:	0.0670186

Alignment:
HDTAATTAATTAHD
HDTGTATACAHD--

Original motif Consensus sequence: HDTAATTAATTAHD



Reverse complement motif Consensus sequence: DHTAATTAATTADH

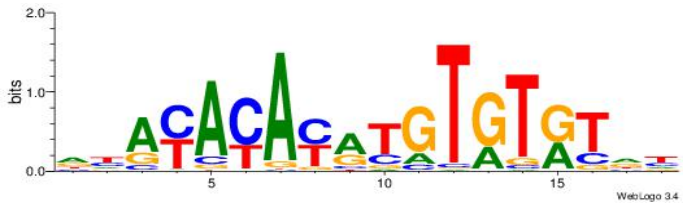


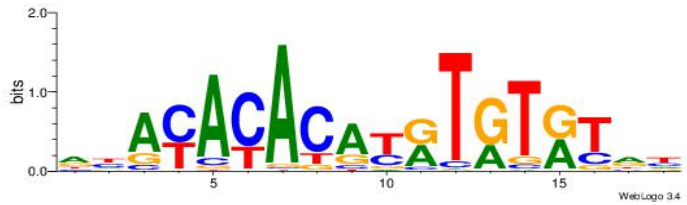
Dataset #:	4
Motif ID:	97
Motif name:	ryayAyAyrtGTRTrTry
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	12
Similarity score:	0.0681793

Alignment:
DHAYAYAYRTGTGTRTDH
-----HDTGTATACAHD-

Original motif Consensus sequence: DHAYAYAYRTGTGTRTDH

Reverse complement motif Consensus sequence: HDAMACACAKKTKTKTHD



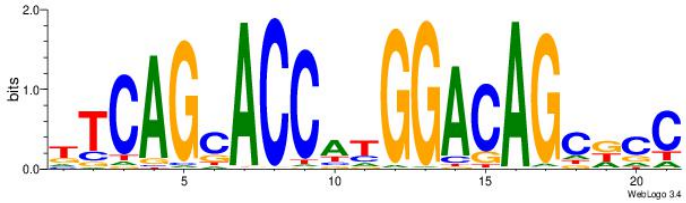


Dataset #:	3
Motif ID:	35
Motif name:	REST
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	12
Similarity score:	0.0704332

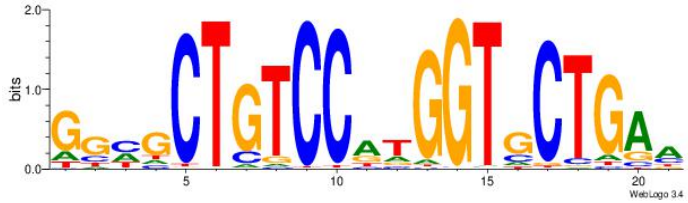
Alignment:

```
GGYGCTGTCCATGGTGCTGAA
--------HDTGTATACAHD-
```

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC

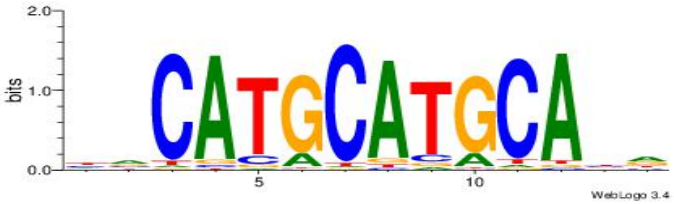


Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA

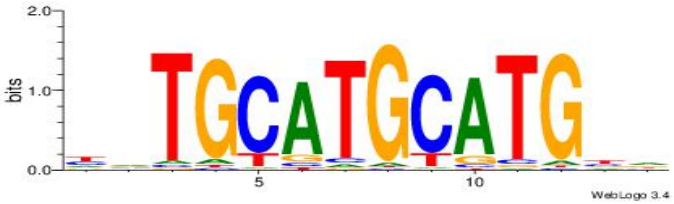


Dataset #: 4 Motif ID: 101 Motif name: AAAAAAAAAAA

Original motif Consensus sequence: HVCATGCATGCABD



Reverse complement motif Consensus sequence: DVTGCATGCATGB



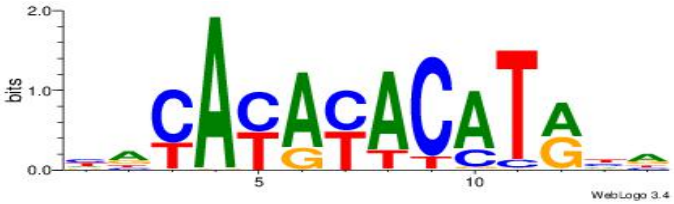
Best Matches for Motif ID 101 (Highest to Lowest)

Dataset #:	4
Motif ID:	75
Motif name:	yayAyAyACATrya
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:	0.0415454

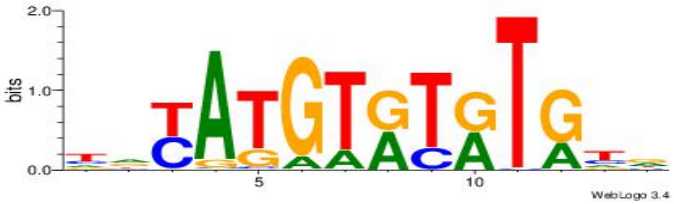
Alignment:

```
HACAYAYACATRHD
HVCATGCATGCABD
```

Original motif Consensus sequence: HACAYAYACATRHD



Reverse complement motif Consensus sequence: DHKATGTKTKTGT

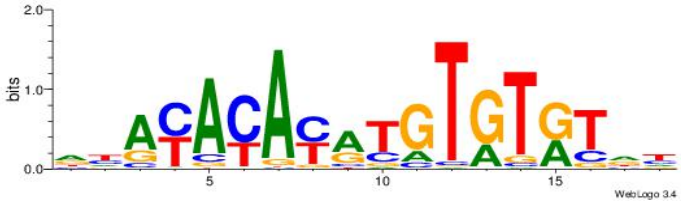


Dataset #:	4
Motif ID:	97
Motif name:	ryayAyAyrtGTRTrTry
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	14
Similarity score:	0.0460165

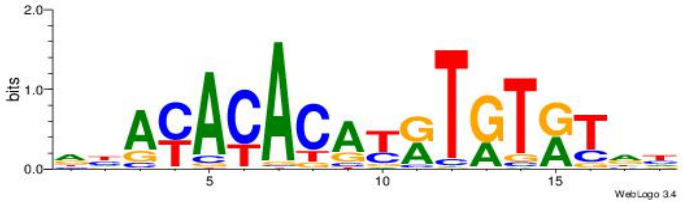
Alignment:

```
DHAYAYAYRTGTGTRTDH
-HVCATGCATGCABD---
```

Original motif Consensus sequence: DHAYAYAYRTGTGTRTDH



Reverse complement motif Consensus sequence: HDAMACACAKKTKTKTHD

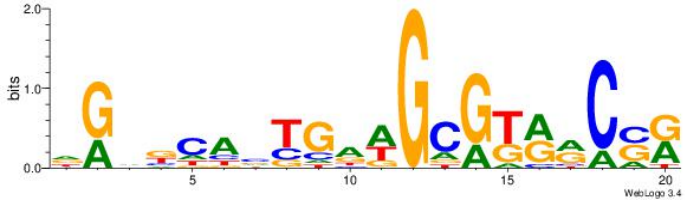


Dataset #:	3
Motif ID:	61
Motif name:	Pax5
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5

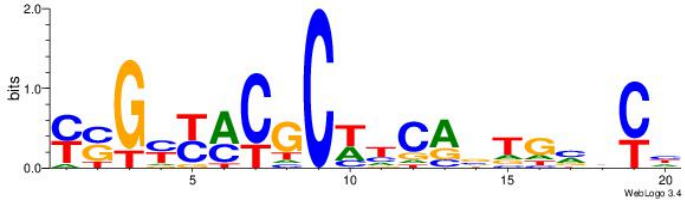
Number of overlap: 14
Similarity score: 0.0566797

Alignment:
MSGKKRCGCWDCABTGBBCD
----DVTGCATGCATGBH--

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR



Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD

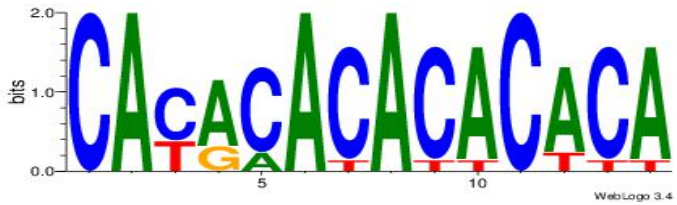


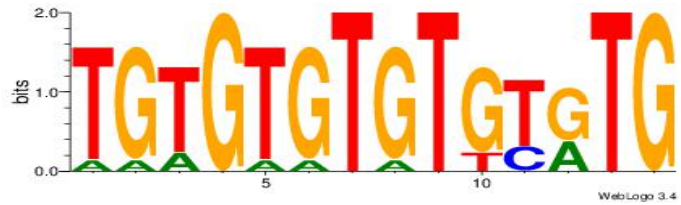
Dataset #: 2
Motif ID: 27
Motif name: Motif 27
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 14
Similarity score: 0.0676844

Alignment:
CAYACACACACACA
HVCATGCATGCABD

Original motif Consensus sequence: CAYACACACACACA

Reverse complement motif Consensus sequence: TGTGTGTGTGTKT

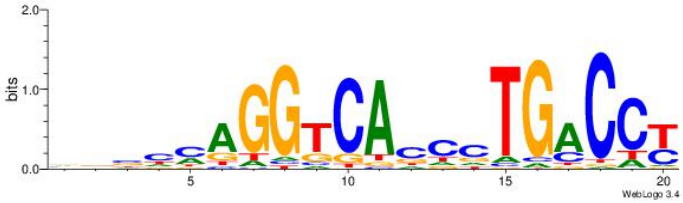




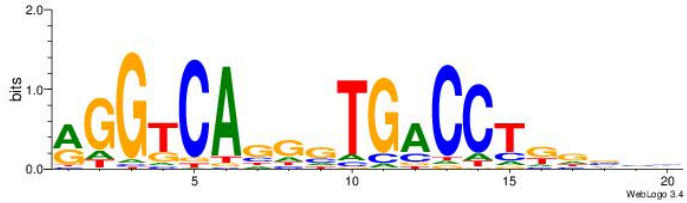
Dataset #: 3
Motif ID: 45
Motif name: ESR1
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 3
Number of overlap: 14
Similarity score: 0.0683653

Alignment:
VDBHMAGGTCACCCTGACCY
--DVTGCATGCATGBH----

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY



Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV



Dataset #: 2

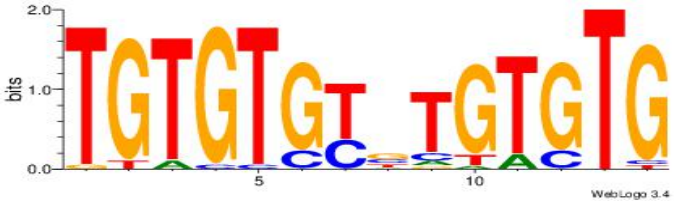
Motif ID:	25
Motif name:	Motif 25
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0701592

Alignment:

CACACAVRCACACA
HVCATGCATGCABD

Original motif Consensus sequence: CACACAVRCACACA

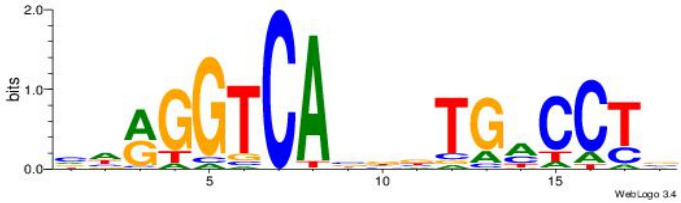
Reverse complement motif Consensus sequence: TGTGTGKVTGTGT



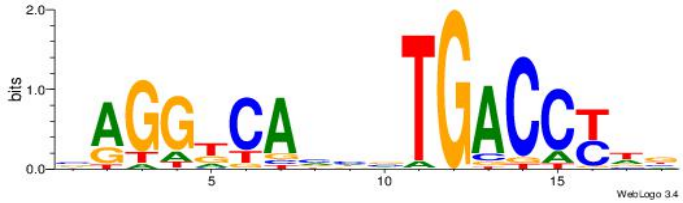
Dataset #:	3
Motif ID:	46
Motif name:	ESR2
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	14
Similarity score:	0.0703872

Alignment:
BAGGYCABHBTGACCKHV
----DVTGCATGCATGBH

Original motif Consensus sequence: VHRGGTCABDBTGMCCTB



Reverse complement motif Consensus sequence:
BAGGYCABHBTGACCKHV

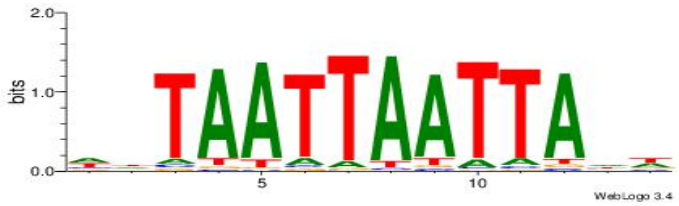


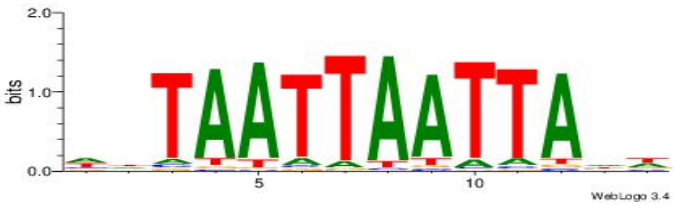
Dataset #:	4
Motif ID:	98
Motif name:	wwTAATTAATTAww
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0704123

Alignment:
DHTAATTAATTADH
DVTGCATGCATGBH

Original motif Consensus sequence: HDTAATTAATTAHD

Reverse complement motif Consensus sequence: DHTAATTAATTADH



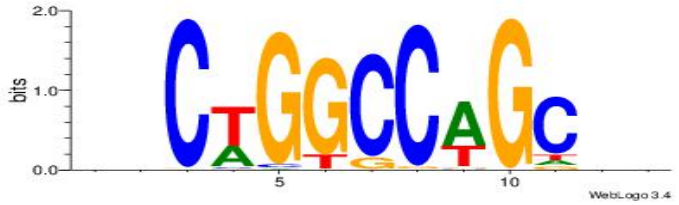


Dataset #:	4
Motif ID:	80
Motif name:	ssCwGGCCwGCss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	13
Similarity score:	0.540961

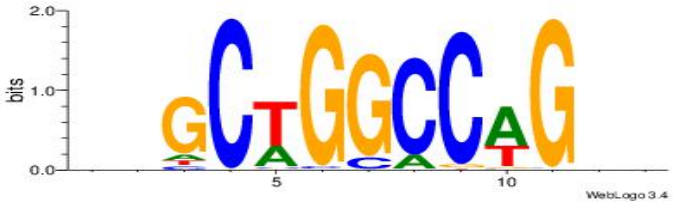
Alignment:

```
-BBGCTGGCCWGBB
DVTGCATGCATGBH
```

Original motif Consensus sequence: BBCWGGCCAGCBB



Reverse complement motif Consensus sequence: BBGCTGGCCWGBI



Dataset #:	4
Motif ID:	100

Motif name:	wrTGTATACAyw
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	1.0215

Alignment:

```
--HDTGTATACAHD
HVCATGCATGCABD
```

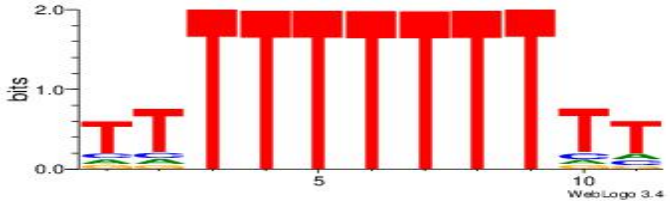
Original motif Consensus sequence: HDTGTATACAHD

Reverse complement motif Consensus sequence: DHTGTATACADH

Dataset #: 4 Motif ID: 102 Motif name: AAAAAAAAAAA

Original motif Consensus sequence: AAAAAAAAAAA

Reverse complement motif Consensus sequence: TTTTTTTTTTT



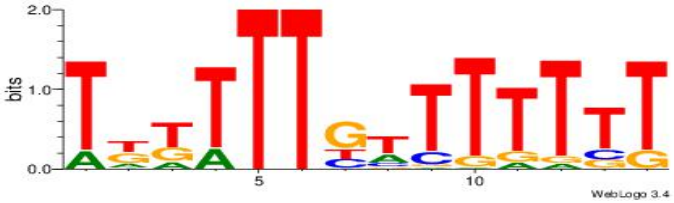
Best Matches for Motif ID 102 (Highest to Lowest)

Dataset #:	2
Motif ID:	26
Motif name:	Motif 26
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.0385663

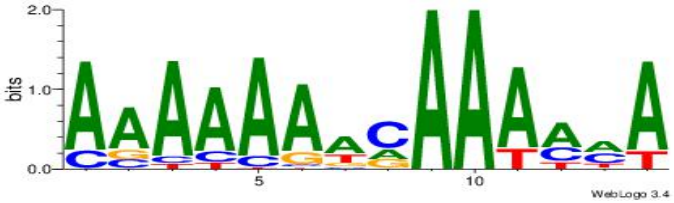
Alignment:

```
AAAAAAACAAARRA
--AAAAAAAAAA-
```

Original motif Consensus sequence: TKKTTTGTTTTTT



Reverse complement motif Consensus sequence: AAAAAAACAAARR



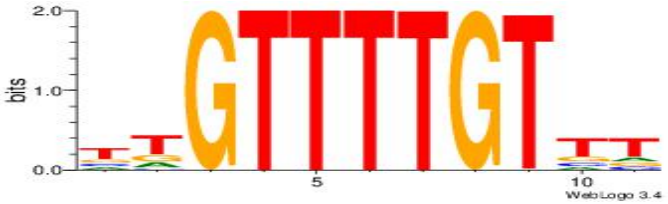
Dataset #:	4
Motif ID:	69
Motif name:	aaACAAAACaa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	11

Similarity score: 0.0415349

Alignment:
AAACAAAACAA
AAAAAAAAAAA

Original motif Consensus sequence: AAACAAAACAA

Reverse complement motif Consensus sequence: TTGTTTTGTTT

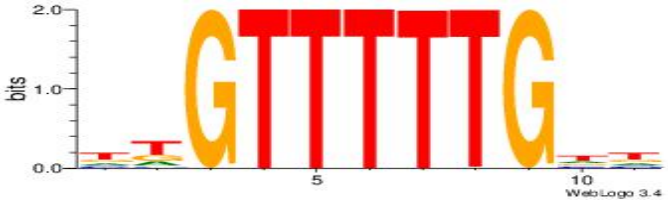


Dataset #: 4
Motif ID: 86
Motif name: aaCAAAAACaa
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 1
Number of overlap: 11
Similarity score: 0.0486936

Alignment:
HTGTTTTTGHH
TTTTTTTTTTT

Original motif Consensus sequence: HHCAAAAACAH

Reverse complement motif Consensus sequence: HTGTTTTTGHH

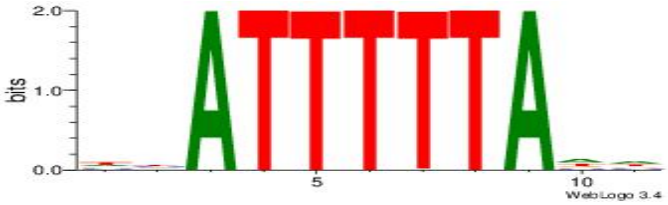


Dataset #:	4
Motif ID:	85
Motif name:	wtATTTTTAww
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.0611986

Alignment:

```
DDTAAAAATHD
AAAAAAAAAAA
```

Original motif Consensus sequence: DHATTTTTADD



Reverse complement motif Consensus sequence: DDTAAAAATHD

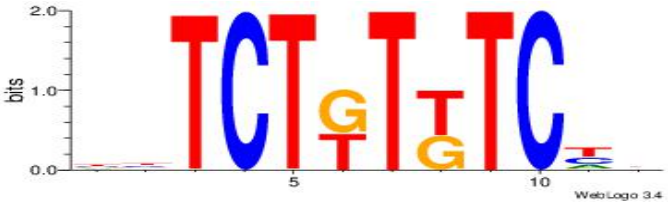
Dataset #:	4
Motif ID:	92

Motif name:	tyTCTkTkTCyy
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	11
Similarity score:	0.071295

Alignment:

```
VHGARAYAGAVV
AAAAAAAAAAA-
```

Original motif Consensus sequence: BBTCTKTKTCHB

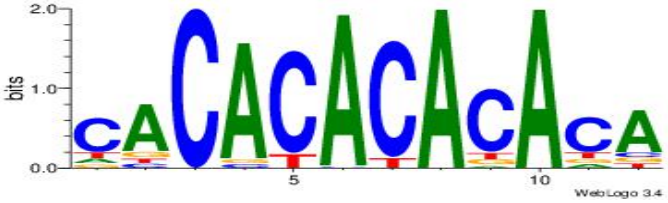


Reverse complement motif Consensus sequence: VHGARAYAGAVV

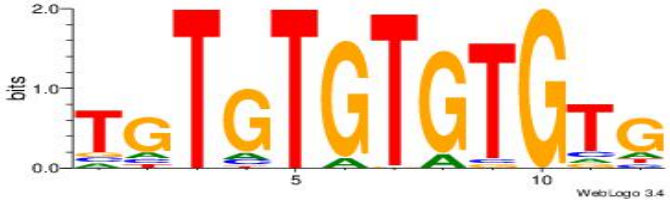
Dataset #:	4
Motif ID:	95
Motif name:	CACACACACACA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0828525

Alignment:
TGTGTGTGTGTG
TTTTTTTTTTT-

Original motif Consensus sequence: CACACACACACA



Reverse complement motif Consensus sequence: TGTGTGTGTGTG

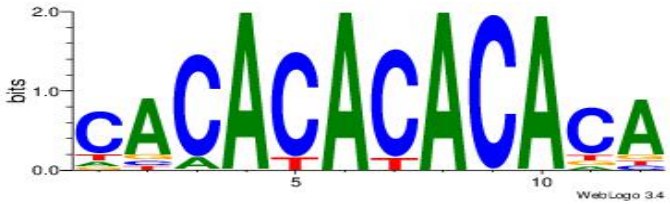


Dataset #:	4
Motif ID:	79
Motif name:	CACACACACACA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	11
Similarity score:	0.0835838

Alignment:
TGTGTGTGTGTG
TTTTTTTTTTT-

Original motif Consensus sequence: CACACACACACA

Reverse complement motif Consensus sequence: TGTGTGTGTGTG

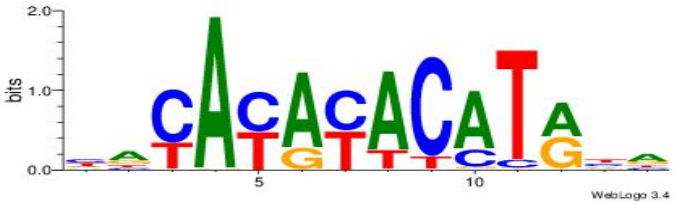


Dataset #:	4
Motif ID:	75
Motif name:	yayAyAyACATrya
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.0851246

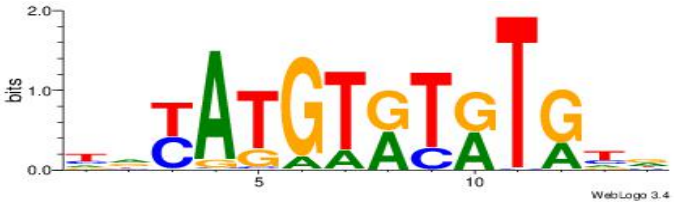
Alignment:

```
DHKATGTKTKTGTD
--TTTTTTTTTTT-
```

Original motif Consensus sequence: HACAYAYACATRHD



Reverse complement motif Consensus sequence: DHKATGTKTKTGT



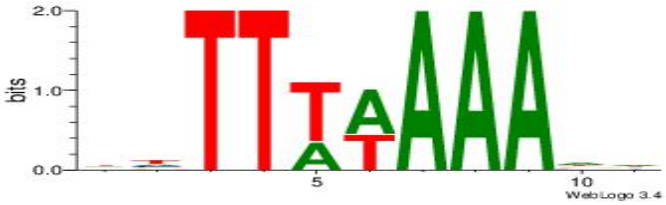
Dataset #:	4
Motif ID:	104

Motif name:	wtTTWwAAAaw
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:	0.0884049

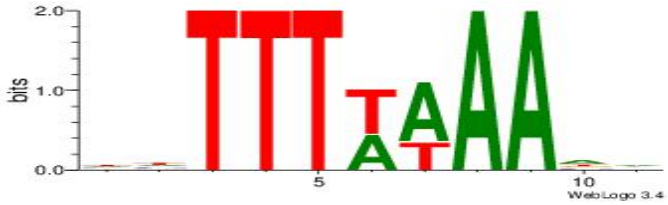
Alignment:

```
HHTTTWAAADD
AAAAAAAAAAA
```

Original motif Consensus sequence: HHTTTWAAADD



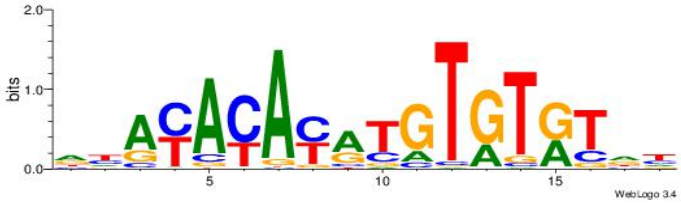
Reverse complement motif Consensus sequence: DDTTTWAAAHH



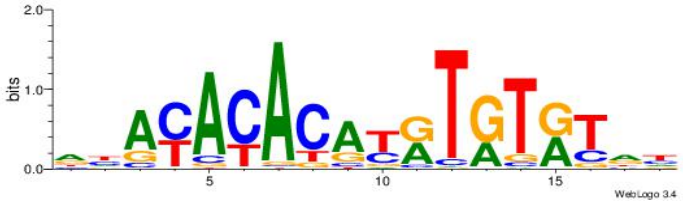
Dataset #:	4
Motif ID:	97
Motif name:	ryayAyAyrtGTRTrTry
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	8
Number of overlap:	11
Similarity score:	0.097006

Alignment:
HDAMACACAKKTKTKTHD
-------TTTTTTTTTTT

Original motif Consensus sequence: DHAYAYAYRTGTGTRTDH

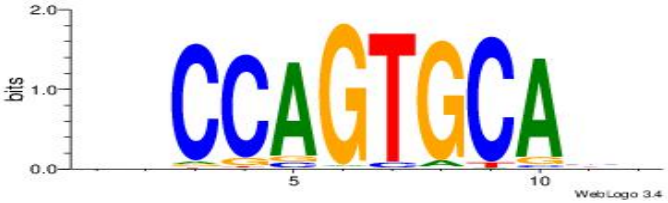


Reverse complement motif Consensus sequence: HDAMACACAKKTKTKTHD

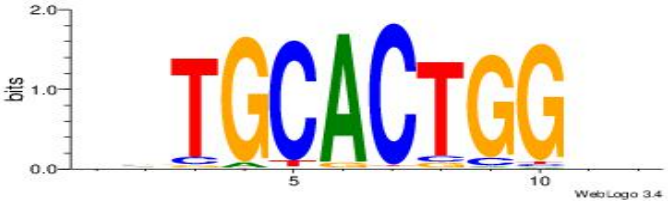


Dataset #: 4 Motif ID: 103 Motif name: ccCCAGTGCAbr

Original motif Consensus sequence: HVCCAGTGCABD



Reverse complement motif Consensus sequence: DBTGCACTGGVD



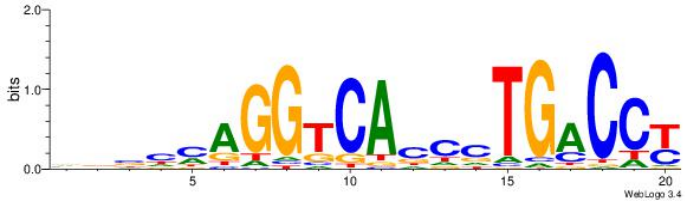
Best Matches for Motif ID 103 (Highest to Lowest)

Dataset #:	3
Motif ID:	45
Motif name:	ESR1
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward

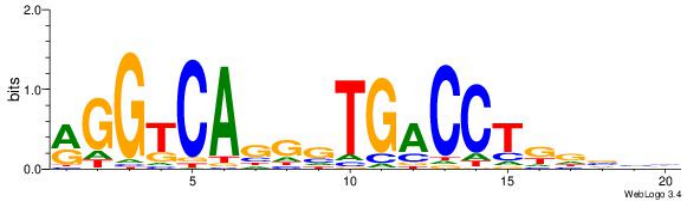
Position number: 2
Number of overlap: 12
Similarity score: 0.0330443

Alignment:
VDBHMAGGTCACCCTGACCY
-HVCCAGTGCABD-------

Original motif Consensus sequence: VDBHMAGGTCACCCTGACCY



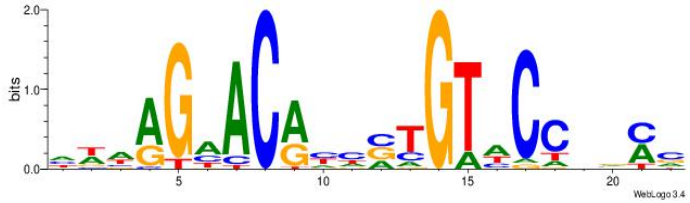
Reverse complement motif Consensus sequence: MGGTCAGGGTGACCTRDBHV



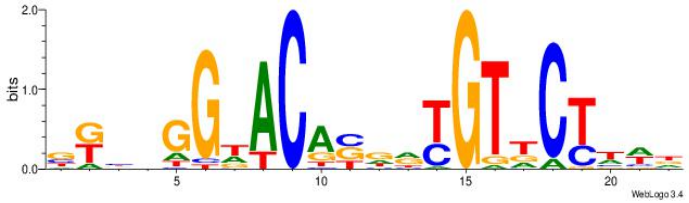
Dataset #: 3
Motif ID: 40
Motif name: Ar
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 12
Similarity score: 0.0429385

Alignment:
VRVDGGHACAVDDKGTHCTDWH
--DBTGCACTGGVD--------

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH

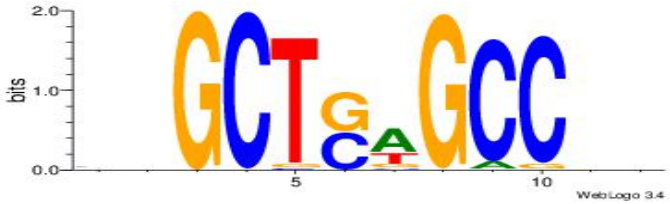


Dataset #:	4
Motif ID:	77
Motif name:	ssGCTswGCCms
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.045363

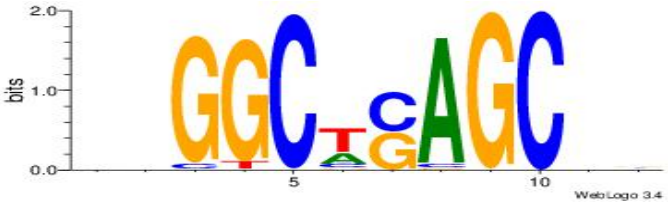
Alignment:

```
BDGGCTSAGCBV
DBTGCACTGGVD
```

Original motif Consensus sequence: VBGCTSAGCCHB



Reverse complement motif Consensus sequence: BDGGCTSAGCBV

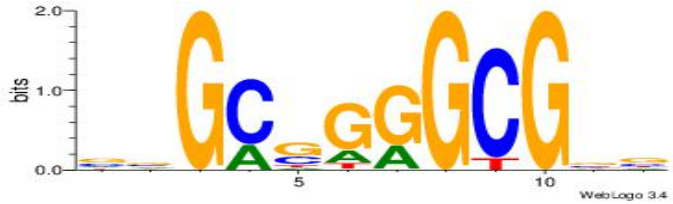


Dataset #:	4
Motif ID:	67
Motif name:	ssGMsGRGCGss
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.0492776

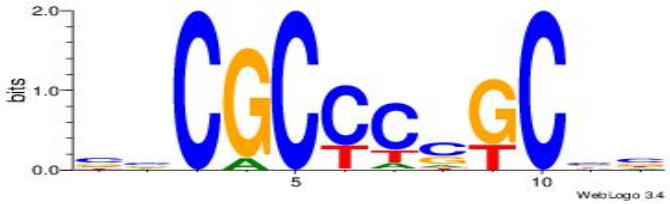
Alignment:

```
BBCGCCCSGCVV
DBTGCACTGGVD
```

Original motif Consensus sequence: VVGCSGGGCGBB



Reverse complement motif Consensus sequence: BBCGCCCSGCVV

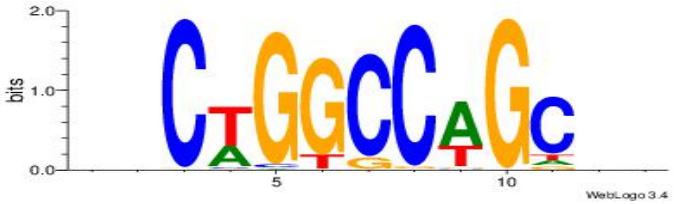


Dataset #:	4
Motif ID:	80
Motif name:	ssCwGGCCwGCss
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	12

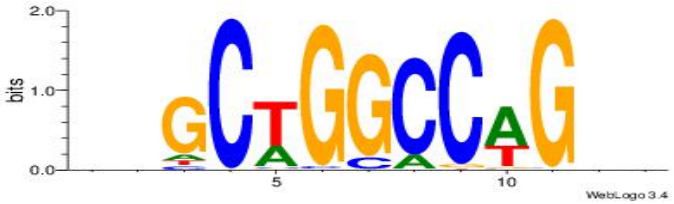
Similarity score: 0.0514849

Alignment:
BBGCTGGCCWGBB
-HVCCAGTGCABD

Original motif Consensus sequence: BBCWGGCCAGCBB



Reverse complement motif Consensus sequence: BBGCTGGCCWGBB

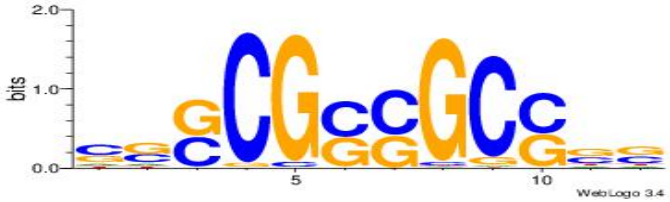


Dataset #: 4
Motif ID: 78
Motif name: sssCGssGCsss
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 12
Similarity score: 0.0547614

Alignment:
SSSCGSSGCSSS
HVCCAGTGCABD

Original motif Consensus sequence: SSSCGSSGCSSS

Reverse complement motif Consensus sequence: SSSGCSSCGSSS



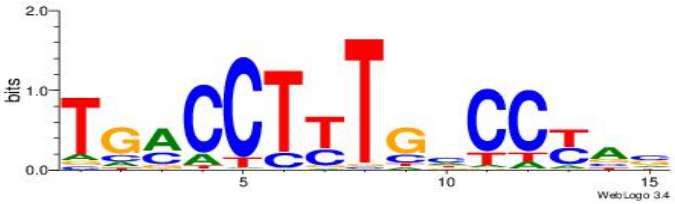
Dataset #:	3
Motif ID:	36
Motif name:	PPARGRXRA
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	12
Similarity score:	0.0564387

Alignment:

```
BTRGGDCARAGGKCA
-DBTGCACTGGVD--
```

Original motif Consensus sequence: BTRGGDCARAGGKCA

Reverse complement motif Consensus sequence: TGRCCTKTGHCCK



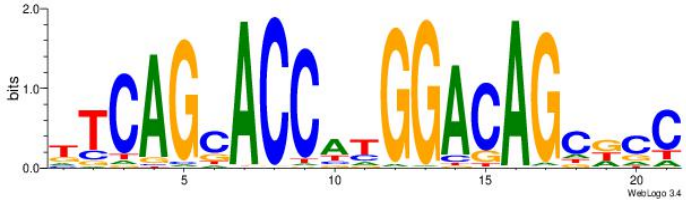
Dataset #:	3
Motif ID:	35

Motif name:	REST
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	12
Similarity score:	0.0567619

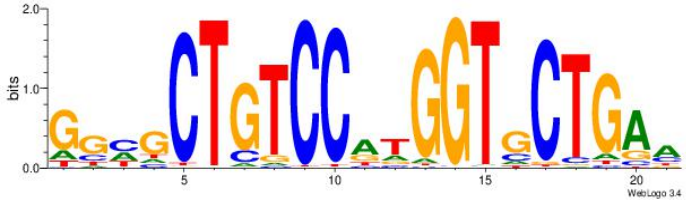
Alignment:

```
TTCAGCACCATGGACAGCKCC
-DBTGCACTGGVD--------
```

Original motif Consensus sequence: TTCAGCACCATGGACAGCKCC



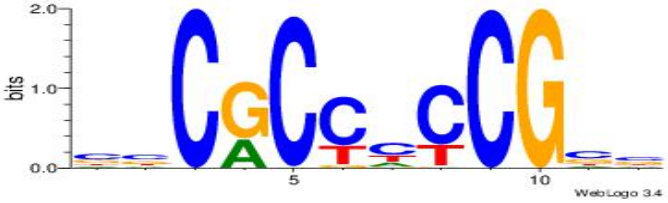
Reverse complement motif Consensus sequence: GGYGCTGTCCATGGTGCTGAA



Dataset #:	4
Motif ID:	88
Motif name:	ssCrCYyYCGss
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:	0.058391

Alignment:
BBCRCCYCCGBB
DBTGCACTGGVD

Original motif Consensus sequence: BBCRCCYCCGBB



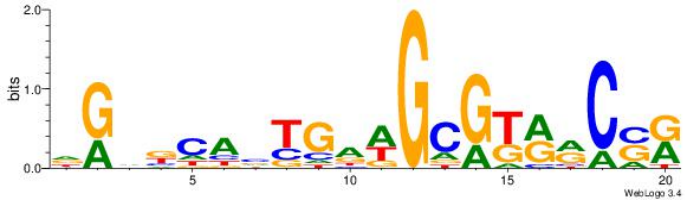
Reverse complement motif Consensus sequence: BBCGGKGGMGBB

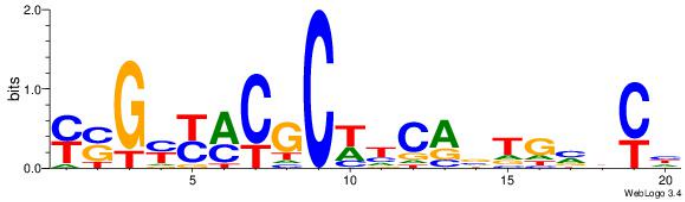
Dataset #:	3
Motif ID:	61
Motif name:	Pax5
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	12
Similarity score:	0.0587621

Alignment:
MSGKKRCGCWDCABTGBBCD
--DBTGCACTGGVD------

Original motif Consensus sequence: DGVBCABTGDWGCGKRRCSR

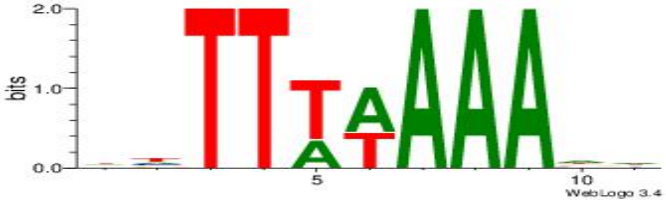
Reverse complement motif Consensus sequence: MSGKKRCGCWDCABTGBBCD



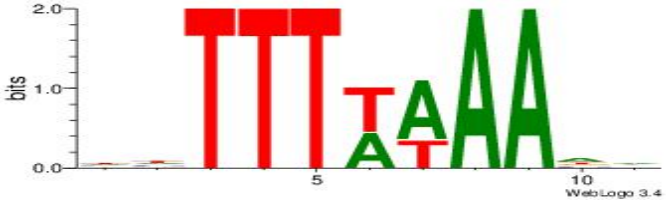


Dataset #: 4 Motif ID: 104 Motif name: wtTTWwAAAaw

Original motif Consensus sequence: HHTTTWAAADD



Reverse complement motif Consensus sequence: DDTTTWAAAHH



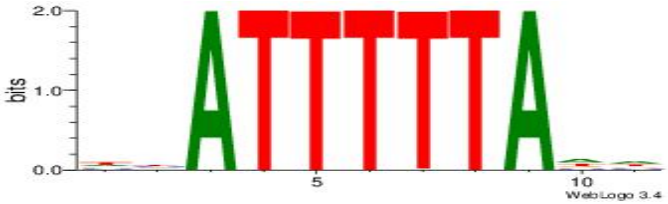
Best Matches for Motif ID 104 (Highest to Lowest)

Dataset #:	4
Motif ID:	85
Motif name:	wtATTTTTAww
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:	0.0593833

Alignment:

```
DHATTTTTADD
DDTTTWAAAHH
```

Original motif Consensus sequence: DHATTTTTADD



Reverse complement motif Consensus sequence: DDTAAAAATHD

Dataset #:	4
Motif ID:	100
Motif name:	wrTGTATACAyw
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.0766819

Alignment:

```
HDTGTATACAHD
-DDTTTWAAAHH
```

Original motif Consensus sequence: HDTGTATACAHD

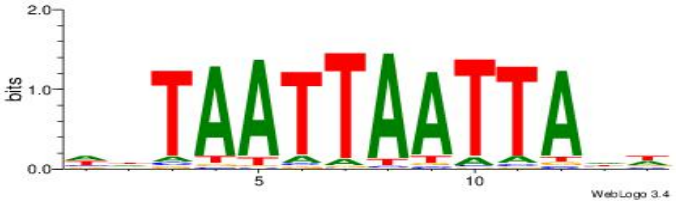
Reverse complement motif Consensus sequence: DHTGTATACADH

Dataset #:	4
Motif ID:	98
Motif name:	wwTAATTAATTAww
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:	0.0874663

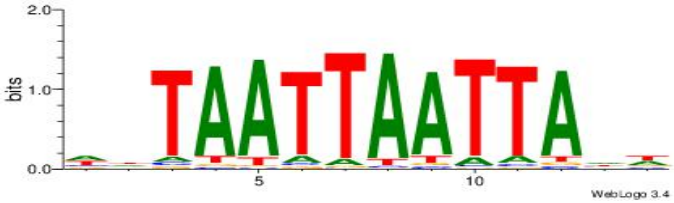
Alignment:

```
HDTAATTAATTAHD
---DDTTTWAAAHH
```

Original motif Consensus sequence: HDTAATTAATTAHD



Reverse complement motif Consensus sequence: DHTAATTAATTADH



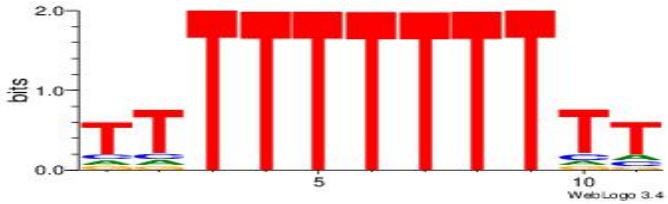
Dataset #:	4
Motif ID:	102
Motif name:	AAAAAAAAAAA
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	11

Similarity score: 0.0882491

Alignment:
AAAAAAAAAAA
HHTTTWAAADD

Original motif Consensus sequence: AAAAAAAAAAA

Reverse complement motif Consensus sequence: TTTTTTTTTTT

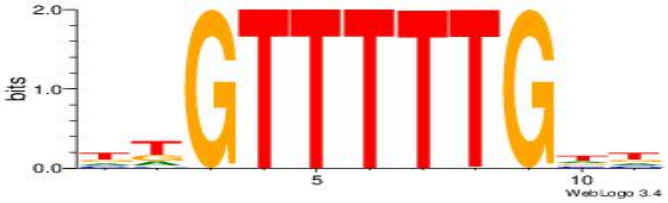


Dataset #: 4
Motif ID: 86
Motif name: aaCAAAAACaa
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 11
Similarity score: 0.0940379

Alignment:
HHCAAAAACAH
HHTTTWAAADD

Original motif Consensus sequence: HHCAAAAACAH

Reverse complement motif Consensus sequence: HTGTTTTTGHH

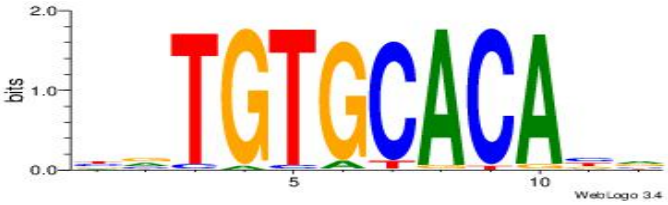


Dataset #:	4
Motif ID:	96
Motif name:	yrTGTGCACAyr
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0947707

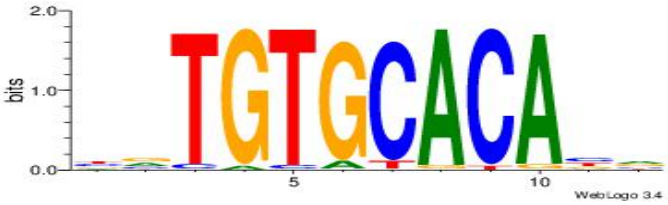
Alignment:

```
BBTGTGCACAVV
DDTTTWAAAHH-
```

Original motif Consensus sequence: BVTGTGCACABV



Reverse complement motif Consensus sequence: BBTGTGCACAVV



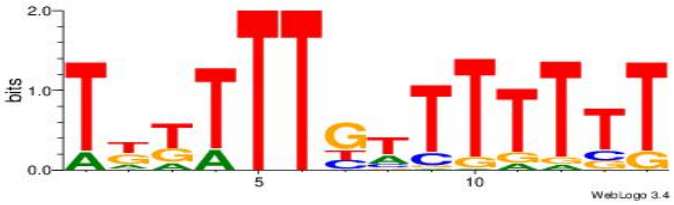
Dataset #:	2
Motif ID:	26

Motif name:	Motif 26
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:	0.095526

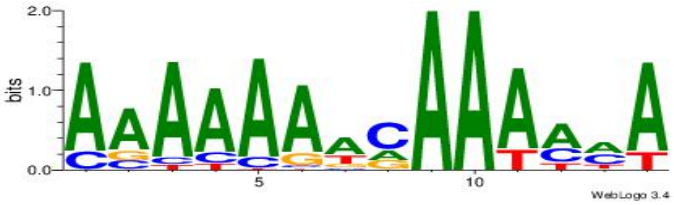
Alignment:

```
AAAAAAACAAARRA
-HHTTTWAAADD--
```

Original motif Consensus sequence: TKKTTTGTTTTTTT



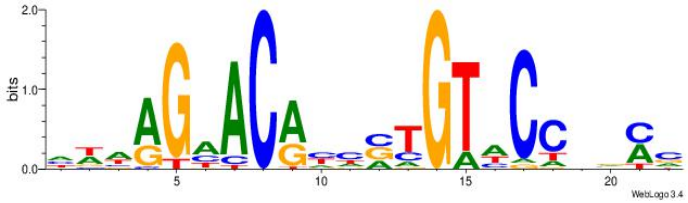
Reverse complement motif Consensus sequence: AAAAAAACAAARRA



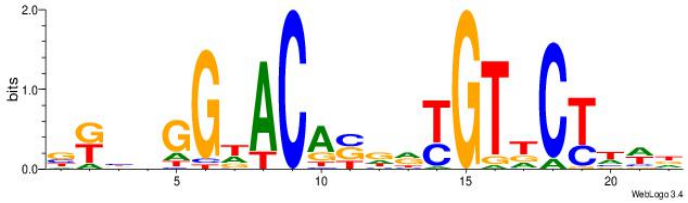
Dataset #:	3
Motif ID:	40
Motif name:	Ar
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.100218

Alignment:
VRVDGGHACAVDDKGTHCTDWH
----------DDTTTWAAAHH

Original motif Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



Reverse complement motif Consensus sequence: VRVDGGHACAVDDKGTHCTDWH

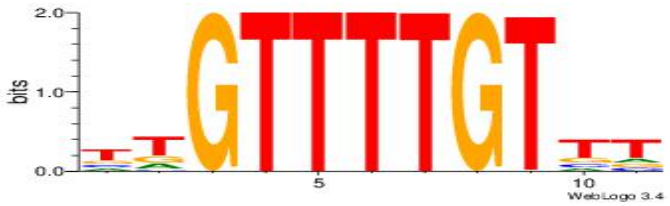


Dataset #:	4
Motif ID:	69
Motif name:	aaACAAAACaa
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.100239

Alignment:
AAACAAAACAA
HHTTTWAAADD

Original motif Consensus sequence: AAACAAAACAA

Reverse complement motif Consensus sequence: TTGTTTTGTTT



Dataset #:	3
Motif ID:	38
Motif name:	NR2F1
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:	0.100766

Alignment:

```
TGAMCTTTGMMCYT
DDTTTWAAAHH---
```

Original motif Consensus sequence: TGAMCTTTGMMCYT

Reverse complement motif Consensus sequence: AKGYYCAAAGRTCA

Results created by MOTIFSIM on 11-20-2016 14:49:39
Runtime: 837.987 seconds

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