



For further information on how to interpret these results or to get a copy of the MEME software please access <http://meme.nbcr.net>.

If you use TOMTOM in your research, please cite the following paper:

Shobhit Gupta, JA Stamatoyannopolous, Timothy Bailey and William Stafford Noble, "Quantifying similarity between motifs", *Genome Biology*, 8(2):R24, 2007. [\[full text\]](#)

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QUERY MOTIFS

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Database	ID	Alt. ID
combined.motif of interest	pattern/Type1/motif_visualization/pwm_Motif_0.feather	pattern/Type1/motif_visualization,
combined.motif of interest	pattern/Type1/motif_visualization/pwm_Motif_118.feather	pattern/Type1/motif_visualization,
combined.motif of interest	pattern/Type1/motif_visualization/pwm_Motif_119.feather	pattern/Type1/motif_visualization,
combined.motif of interest	pattern/Type1/motif_visualization/pwm_Motif_150.feather	pattern/Type1/motif_visualization,
combined.motif of interest	pattern/Type1/motif_visualization/pwm_Motif_214.feather	pattern/Type1/motif_visualization,
combined.motif of interest	pattern/Type1/motif_visualization/pwm_Motif_22.feather	pattern/Type1/motif_visualization,
combined.motif of interest	pattern/Type1/motif_visualization/pwm_Motif_222.feather	pattern/Type1/motif_visualization,
combined.motif of interest	pattern/Type1/motif_visualization/pwm_Motif_24.feather	pattern/Type1/motif_visualization,
combined.motif of interest	pattern/Type1/motif_visualization/pwm_Motif_245.feather	pattern/Type1/motif_visualization,
combined.motif of interest	pattern/Type1/motif_visualization/pwm_Motif_246.feather	pattern/Type1/motif_visualization,

Database	ID	Alt. ID
combined.motif of interest	pattern/Type1/motif_visualization/pwm_Motif_300.feather	pattern/Type1/motif_visualization,
combined.motif of interest	pattern/Type1/motif_visualization/pwm_Motif_302.feather	pattern/Type1/motif_visualization,
combined.motif of interest	pattern/Type1/motif_visualization/pwm_Motif_37.feather	pattern/Type1/motif_visualization,
combined.motif of interest	pattern/Type1/motif_visualization/pwm_Motif_55.feather	pattern/Type1/motif_visualization,
combined.motif of interest	pattern/Type1/motif_visualization/pwm_Motif_69.feather	pattern/Type1/motif_visualization,
combined.motif of interest	pattern/Type1/motif_visualization/pwm_Motif_78.feather	pattern/Type1/motif_visualization,
combined.motif of interest	pattern/Type1/motif_visualization/pwm_Motif_9.feather	pattern/Type1/motif_visualization,
combined.motif of interest	pattern/Type1/motif_visualization/pwm_Motif_96.feather	pattern/Type1/motif_visualization,

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Database	Used	Matched
Homo sapiens	733	35

**MATCHES TO PATTERN/TYPE1/MOTIF_VISUALIZATION/PWM_MOTIF_24.FEATHER
(PATTERN/TYPE1/MOTIF_VISUALIZATION/PWM_MOTIF_24.FEATHER)**[Previous](#) [Next](#) [Top](#)

Summary	Alignment
Name	M2277_1.02 (FLI1)
Database	Homo sapiens
p-value	2.47e-07
E-value	1.81e-04
q-value	3.56e-04
Overlap	8

Offset 2
Orientation Normal
[Show logo download options](#)

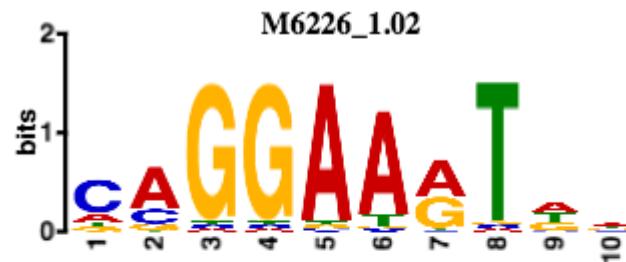


pattern/Type1/motif_visualization/pwm_Motif_24.feather

Summary

Alignment

Name M6226_1.02 (FEV)
Database Homo sapiens
p-value 1.22e-06
E-value 8.95e-04
q-value 8.81e-04
Overlap 8
Offset 1
Orientation Normal
[Show logo download options](#)

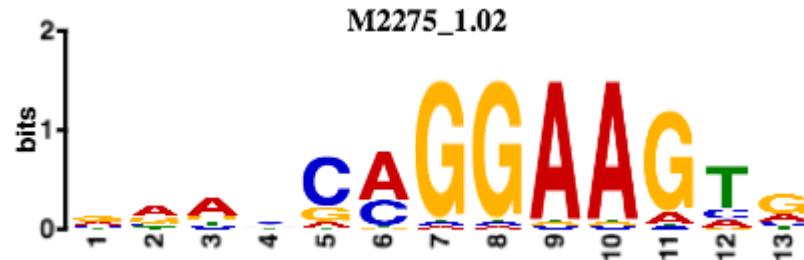


pattern/Type1/motif_visualization/pwm_Motif_24.feather

Summary

Alignment

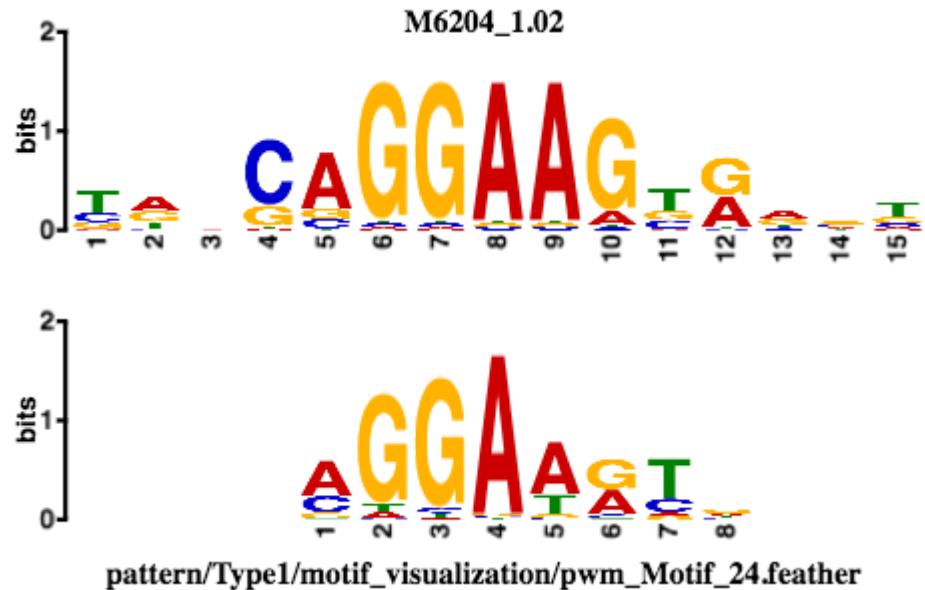
Name M2275_1.02 (ELF1)
Database Homo sapiens
p-value 4.17e-06
E-value 3.06e-03
q-value 2.01e-03
Overlap 8
Offset 5
Orientation Normal
[Show logo download options](#)



pattern/Type1/motif_visualization/pwm_Motif_24.feather

Summary

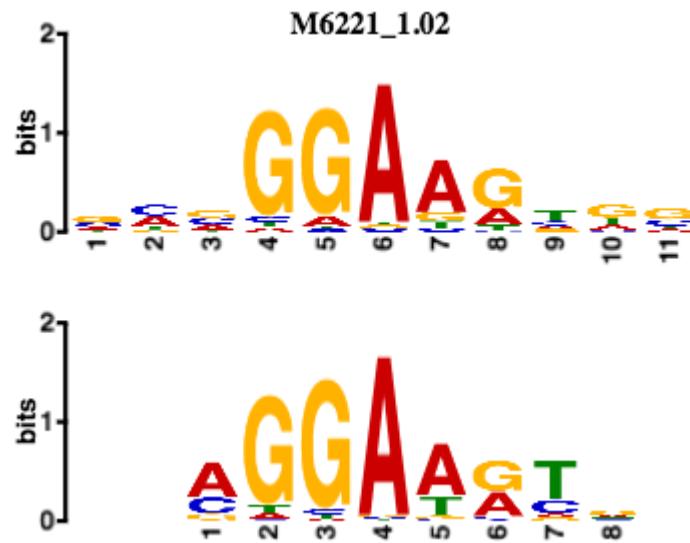
Name	M6204_1.02 (ELF2)
Database	Homo sapiens
p-value	8.88e-06
E-value	6.51e-03
q-value	3.20e-03
Overlap	8
Offset	4
Orientation	Normal

[Show logo download options](#)**Alignment**

pattern/Type1/motif_visualization/pwm_Motif_24.feather

Summary

Name	M6221_1.02 (ETS2)
Database	Homo sapiens
p-value	2.81e-05
E-value	2.06e-02
q-value	7.61e-03
Overlap	8
Offset	2
Orientation	Normal

[Show logo download options](#)**Alignment**

pattern/Type1/motif_visualization/pwm_Motif_24.feather

Summary

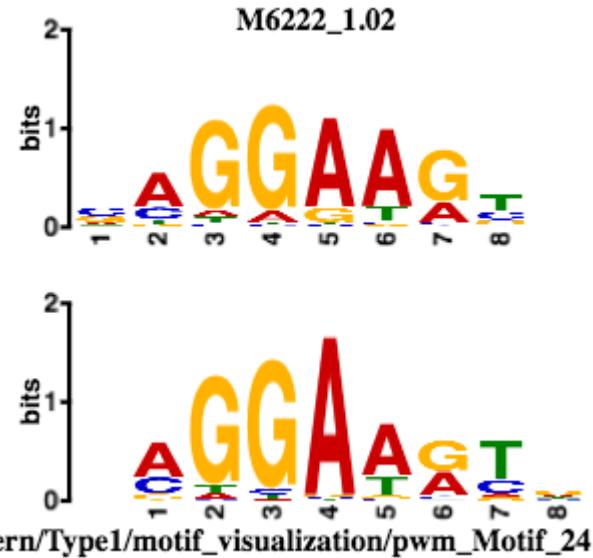
Name	M6206_1.02 (ELF5)
Database	Homo sapiens
p-value	3.16e-05
E-value	2.32e-02
q-value	7.61e-03
Overlap	8
Offset	3
Orientation	Normal

[Show logo download options](#)**Alignment**

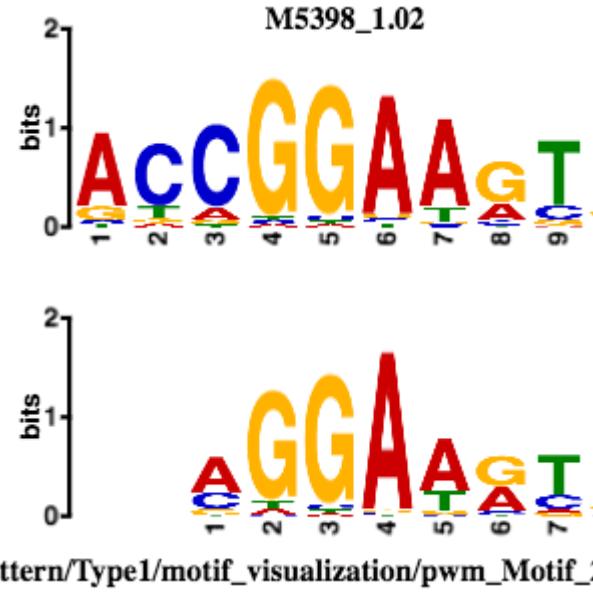
pattern/Type1/motif_visualization/pwm_Motif_24.feather

Summary

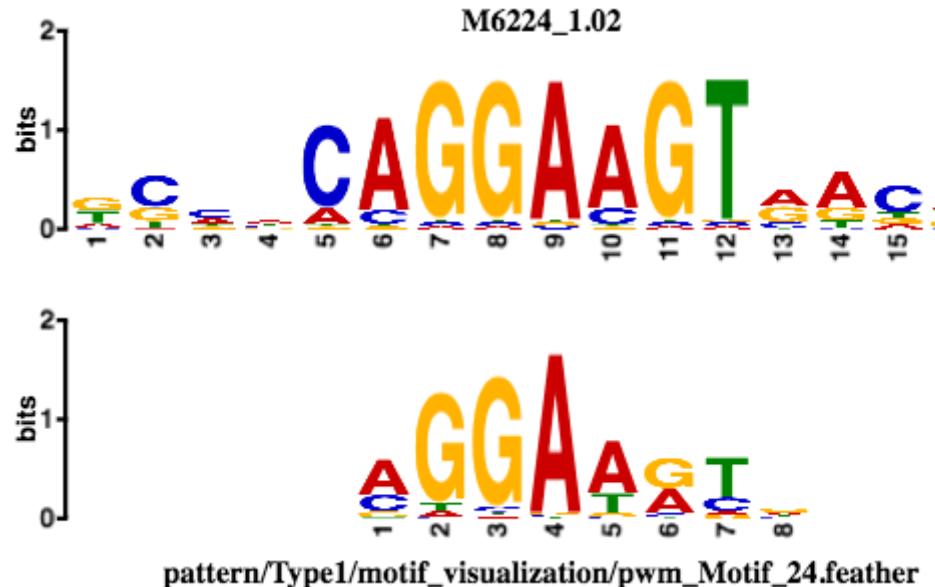
Name	M6222_1.02 (ETV4)
Database	Homo sapiens
p-value	4.08e-05
E-value	2.99e-02
q-value	8.40e-03
Overlap	7
Offset	1
Orientation	Normal
Show logo download options	

Alignment**Summary**

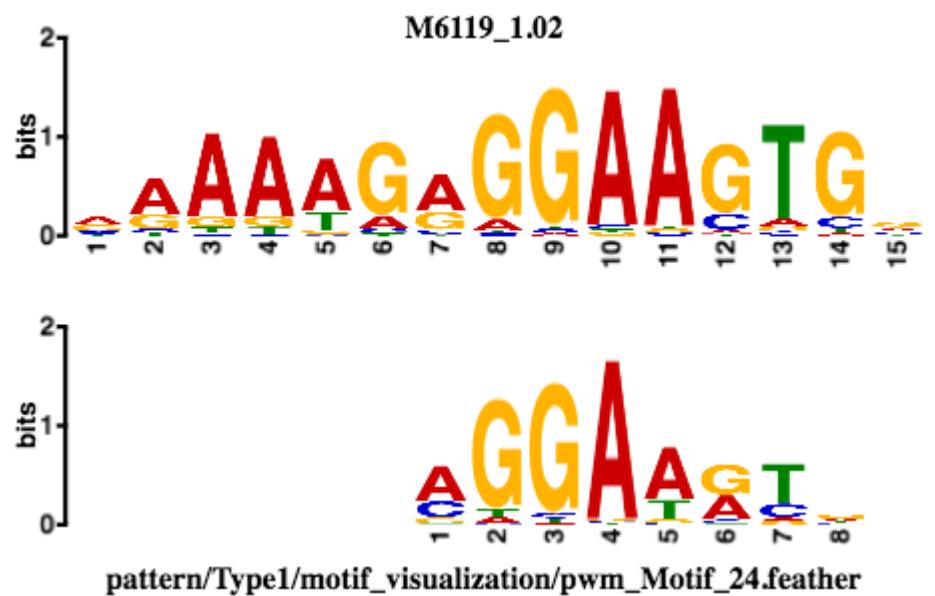
Name	M5398_1.02 (ERF)
Database	Homo sapiens
p-value	5.43e-05
E-value	3.98e-02
q-value	9.80e-03
Overlap	8
Offset	2
Orientation	Normal
Show logo download options	

Alignment**Summary**

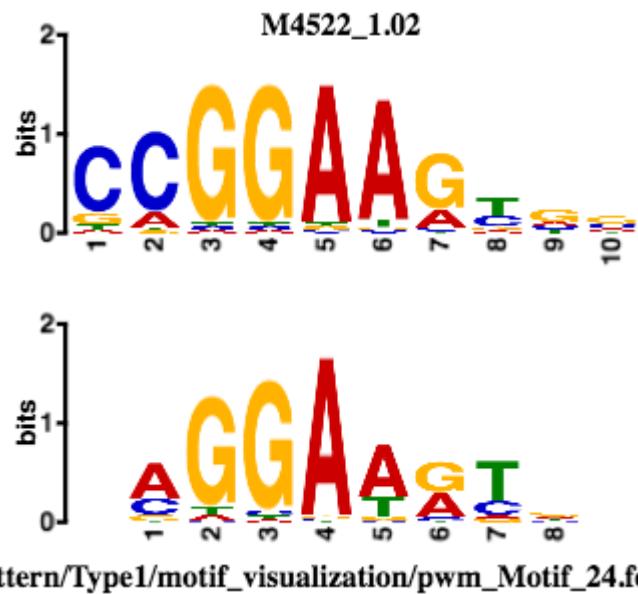
Name	M6224_1.02 (ETV7)
Database	Homo sapiens
p-value	7.02e-05
E-value	5.15e-02
q-value	1.13e-02
Overlap	8
Offset	5
Orientation	Normal
Show logo download options	

**Summary**

Name	M6119_1.02 (SPI1)
Database	Homo sapiens
p-value	7.92e-05
E-value	5.81e-02
q-value	1.14e-02
Overlap	8
Offset	6
Orientation	Normal
Show logo download options	

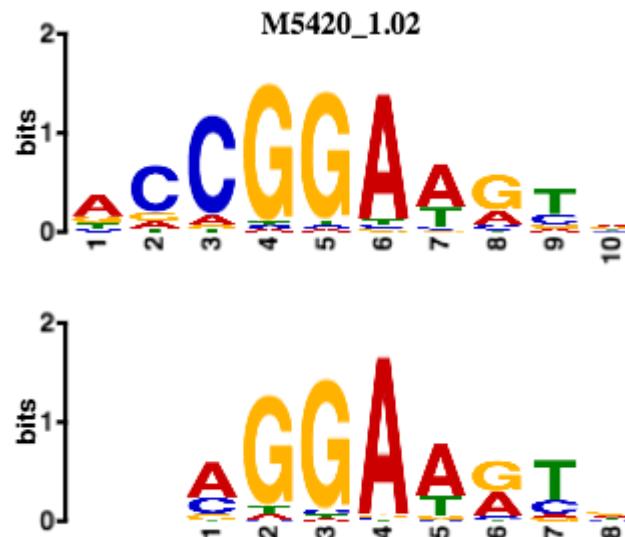
Alignment**Summary**

Name	M4522_1.02 (ELK4)
Database	Homo sapiens
p-value	9.02e-05
E-value	6.61e-02
q-value	1.18e-02
Overlap	8
Offset	1
Orientation	Normal
Show logo download options	

Alignment

Summary

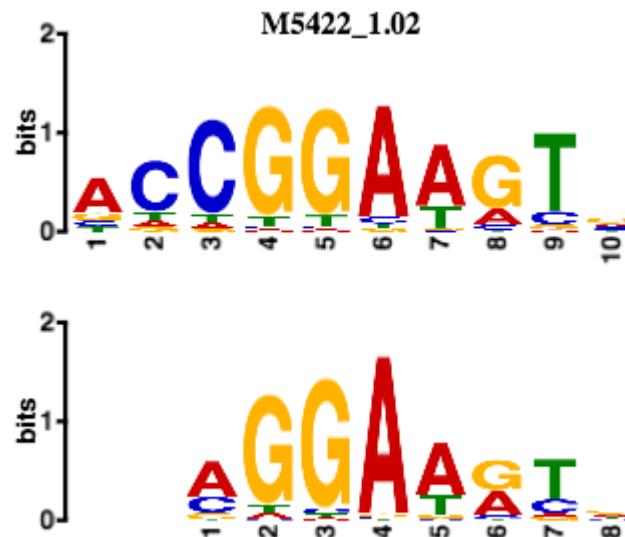
Name	M5420_1.02 (ETV1)
Database	Homo sapiens
p-value	1.31e-04
E-value	9.61e-02
q-value	1.34e-02
Overlap	8
Offset	2
Orientation	Normal
Show logo download options	

Alignment

[Pattern/Type1/motif_visualization/pwm_Motif_24.fasta](#)

Summary

Name	M5422_1.02 (ETV3)
Database	Homo sapiens
p-value	1.31e-04
E-value	9.61e-02
q-value	1.34e-02
Overlap	8
Offset	2
Orientation	Normal
Show logo download options	

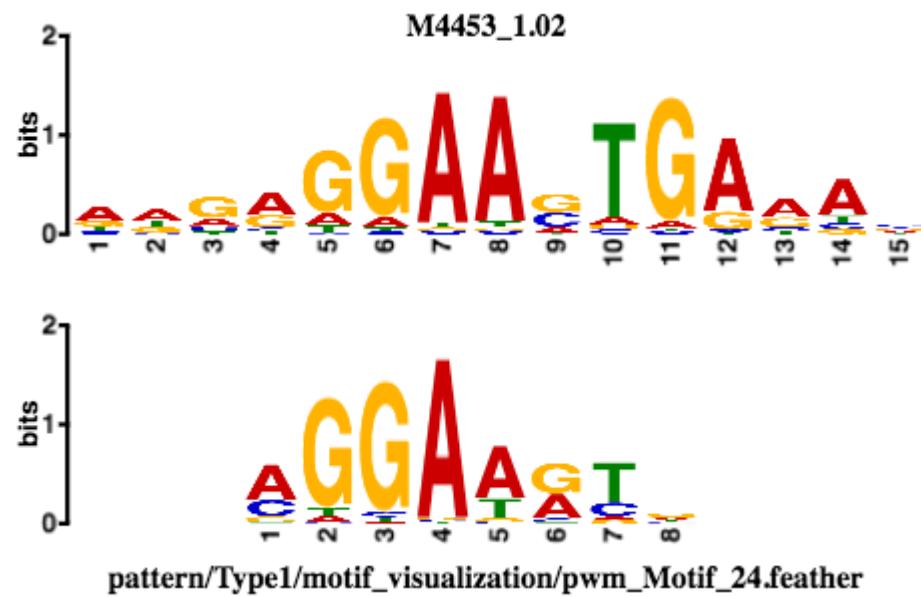
Alignment

[Pattern/Type1/motif_visualization/pwm_Motif_24.fasta](#)

Summary

Name	M4453_1.02 (BCL11A)
Database	Homo sapiens
p-value	1.32e-04
E-value	9.67e-02
q-value	1.34e-02
Overlap	8
Offset	3
Orientation	Normal
Show logo download options	

Alignment



MATCHES TO PATTERN/TYPE1/MOTIF_VISUALIZATION/PWM_MOTIF_69.FEATHER

(PATTERN/TYPE1/MOTIF_VISUALIZATION/PWM_MOTIF_69.FEATHER)

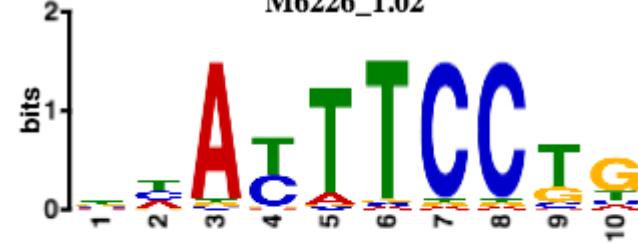
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Summary

Alignment

Name	M6226_1.02 (FEV)
Database	Homo sapiens
p-value	9.56e-08
E-value	7.01e-05
q-value	1.38e-04
Overlap	8
Offset	1
Orientation	Reverse Complement
Show logo download options	

M6226_1.02



bits



pattern/Type1/motif_visualization/pwm_Motif_69.fe

Summary

Alignment

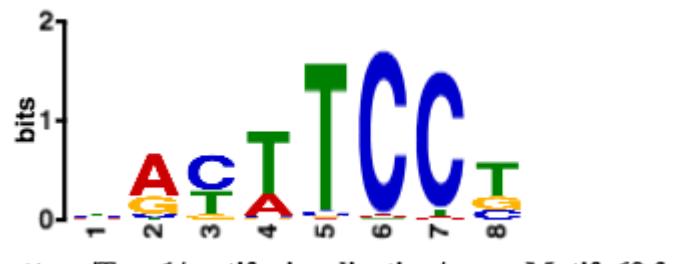
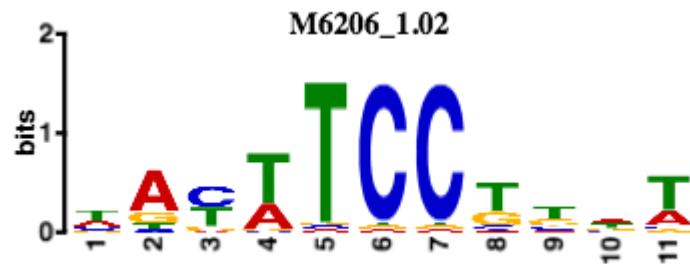
Name	M6206_1.02 (ELF5)
Database	Homo sapiens
p-value	9.93e-07
E-value	7.28e-04
q-value	7.11e-04
Overlap	8
Offset	0

bits

pattern/Type1/motif_visualization/pwm_Motif_69.fe

Orientation

Reverse Complement

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pattern/Type1/motif_visualization/pwm_Motif_69.feather

Summary**Alignment****Name**[M2277_1.02](#)
[\(FLI1\)](#)**Database**

Homo sapiens

p-value

1.48e-06

E-value

1.08e-03

q-value

7.11e-04

Overlap

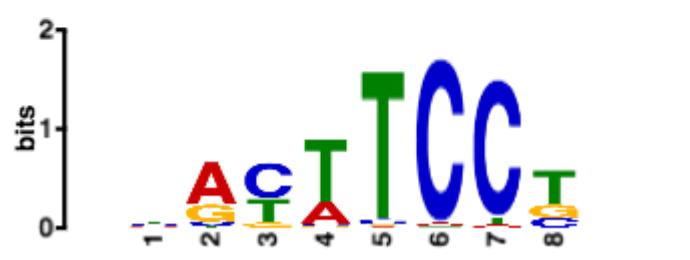
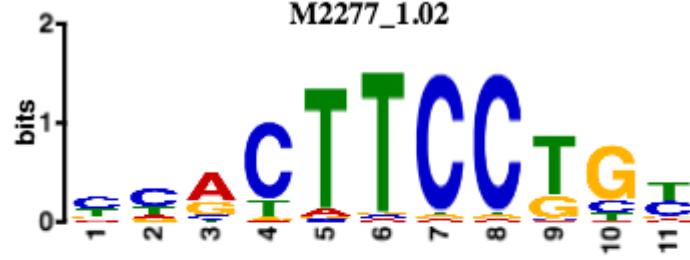
8

Offset

1

Orientation

Reverse Complement

[Show logo download options](#)**M2277_1.02**

pattern/Type1/motif_visualization/pwm_Motif_69.feather

Summary**Alignment****Name**[M6204_1.02](#)
[\(ELF2\)](#)**Database**

Homo sapiens

p-value

1.99e-06

E-value

1.46e-03

q-value

7.16e-04

Overlap

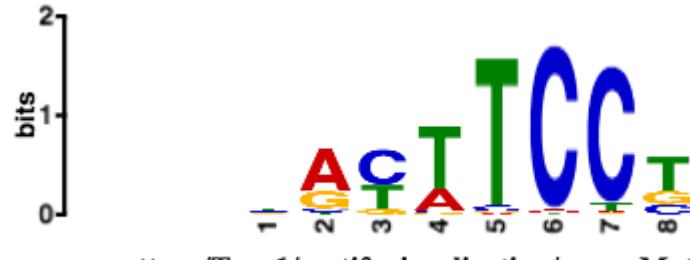
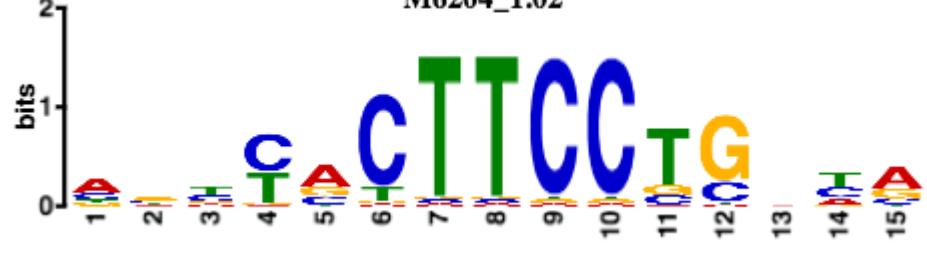
8

Offset

3

Orientation

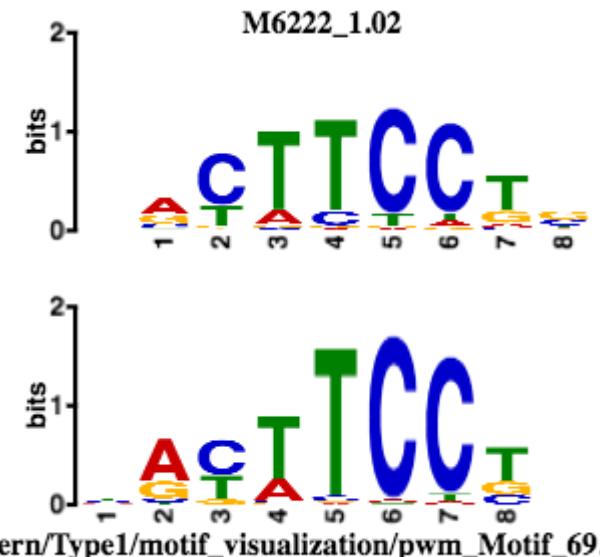
Reverse Complement

[Show logo download options](#)**M6204_1.02**

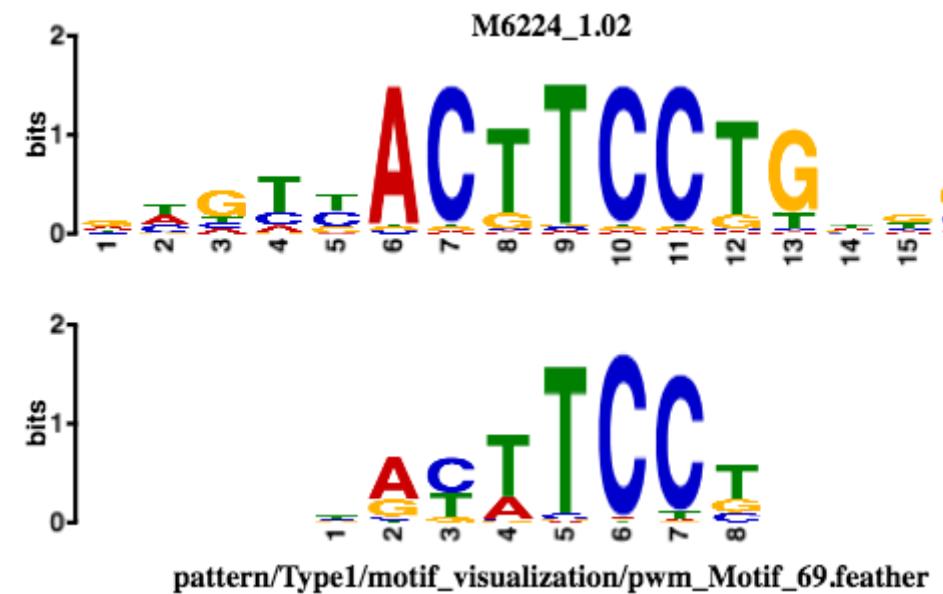
pattern/Type1/motif_visualization/pwm_Motif_69.feather

Summary**Alignment**

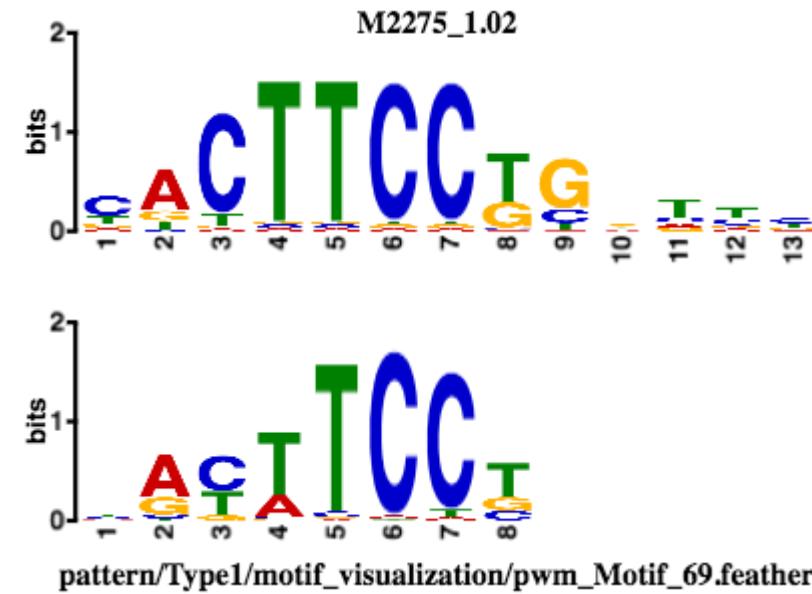
Name	M6222_1.02 (ETV4)
Database	Homo sapiens
p-value	2.03e-05
E-value	1.49e-02
q-value	5.48e-03
Overlap	7
Offset	-1
Orientation	Reverse Complement
Show logo download options	

**Summary**

Name	M6224_1.02 (ETV7)
Database	Homo sapiens
p-value	2.28e-05
E-value	1.67e-02
q-value	5.48e-03
Overlap	8
Offset	4
Orientation	Reverse Complement
Show logo download options	

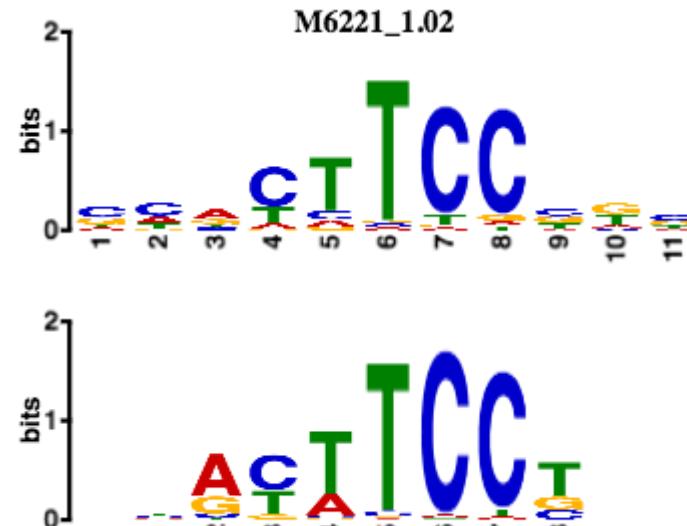
Alignment**Summary**

Name	M2275_1.02 (ELF1)
Database	Homo sapiens
p-value	2.81e-05
E-value	2.06e-02
q-value	5.78e-03
Overlap	8
Offset	0
Orientation	Reverse Complement
Show logo download options	

Alignment

Summary**Alignment**

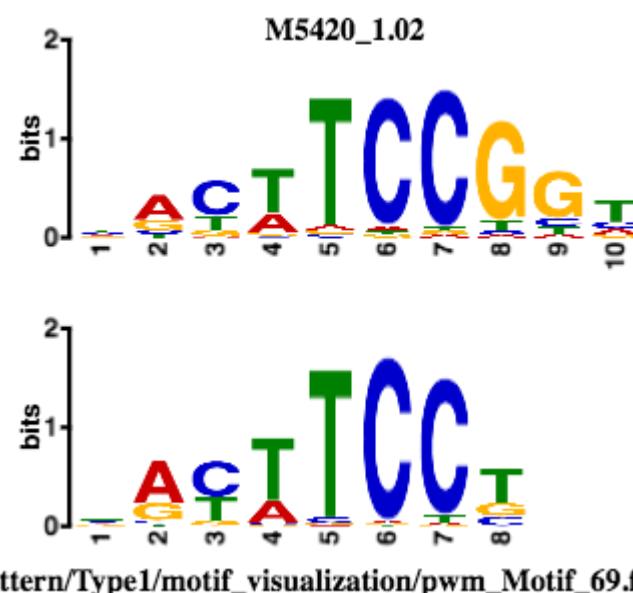
Name	M6221_1.02 (ETS2)
Database	Homo sapiens
p-value	4.27e-05
E-value	3.13e-02
q-value	7.70e-03
Overlap	8
Offset	1
Orientation	Reverse Complement
Show logo download options	

**Alignment**

[pattern/Type1/motif_visualization/pwm_Motif_69.few](#)

Summary

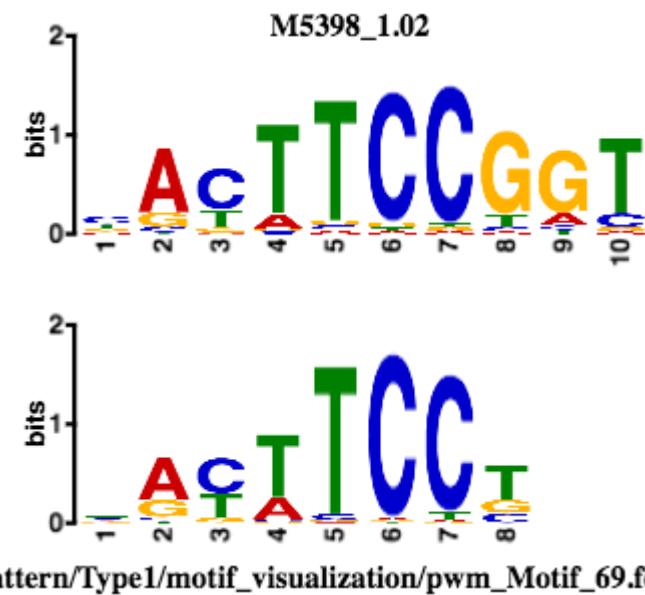
Name	M5420_1.02 (ETV1)
Database	Homo sapiens
p-value	6.98e-05
E-value	5.12e-02
q-value	1.12e-02
Overlap	8
Offset	0
Orientation	Reverse Complement
Show logo download options	

**Alignment**

[pattern/Type1/motif_visualization/pwm_Motif_69.few](#)

Summary

Name	M5398_1.02 (ERF)
Database	Homo sapiens
p-value	1.30e-04
E-value	9.49e-02
q-value	1.87e-02
Overlap	8
Offset	0
Orientation	Reverse Complement
Show logo download options	

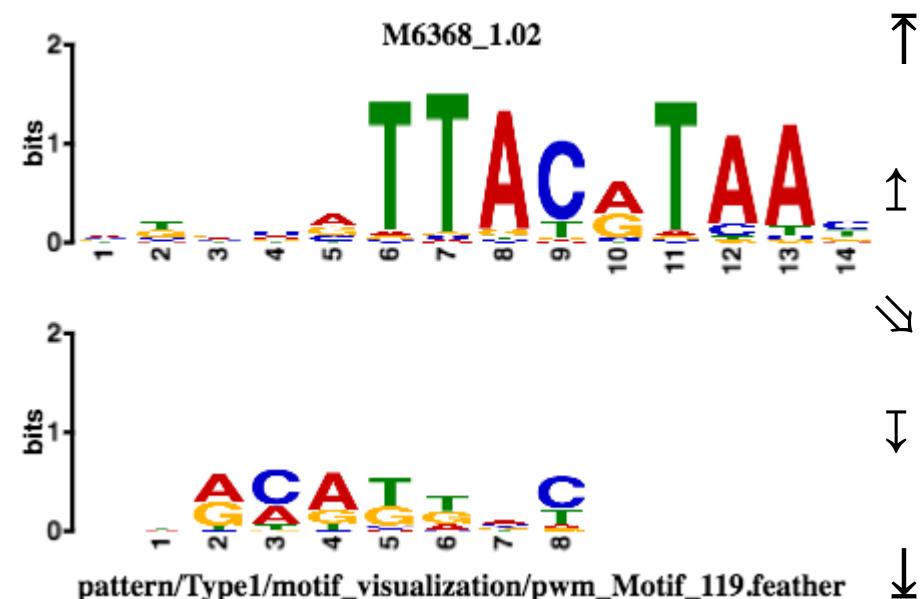


MATCHES TO PATTERN/TYPE1/MOTIF VISUALIZATION/PWM MOTIF 119.FEATHER

(PATTERN/TYPE1/MOTIF_VISUALIZATION/PWM MOTIF 119.FEATHER)

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Summary	
Name	<u>M6368_1.02</u> <u>(NFIL3)</u>
Database	Homo sapiens
p-value	3.46e-06
E-value	2.53e-03
q-value	5.07e-03
Overlap	8
Offset	1
Orientation	Normal
Show logo download options	



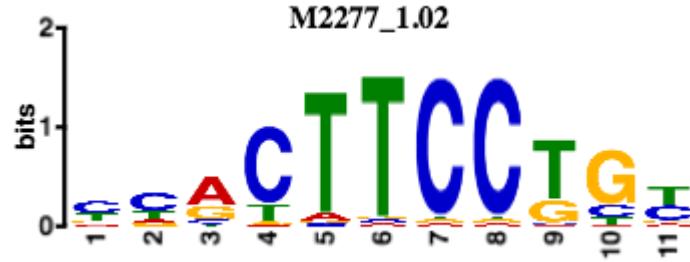
MATCHES TO PATTERN/TYPE1/MOTIF VISUALIZATION/PWM MOTIF 246-Feather

(PATTERN/TYPE1/MOTIF VISUALIZATION/PWM MOTIF 246.FEATHER)

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Summary	
Name	M2277 1.0 (FL1)
Database	Homo sapiens
p-value	4.36e-05
F-value	3.18e-03

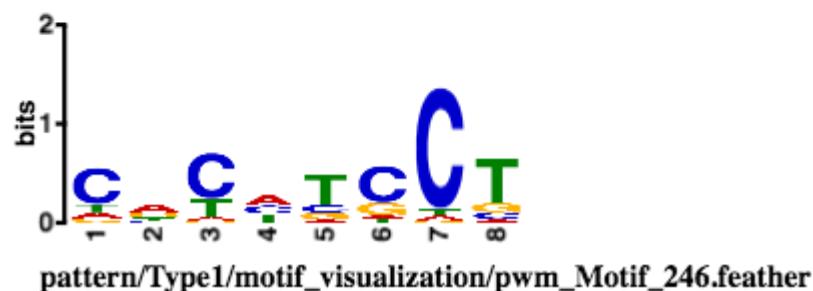
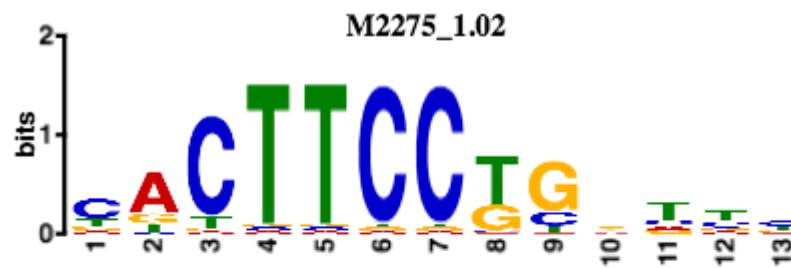
q-value	6.34e-02
Overlap	8
Offset	1
Orientation	Reverse Complement
Show logo download options	



Summary

Name	M2275_1.02 (ELF1)
Database	Homo sapiens
p-value	1.05e-04
E-value	7.67e-02
q-value	7.62e-02
Overlap	8
Offset	0
Orientation	Reverse Complement
Show logo download options	

Alignment



MATCHES TO PATTERN/TYPE1/MOTIF_VISUALIZATION/PWM_MOTIF_9.FEATHER

(PATTERN/TYPE1/MOTIF_VISUALIZATION/PWM_MOTIF_9.FEATHER)

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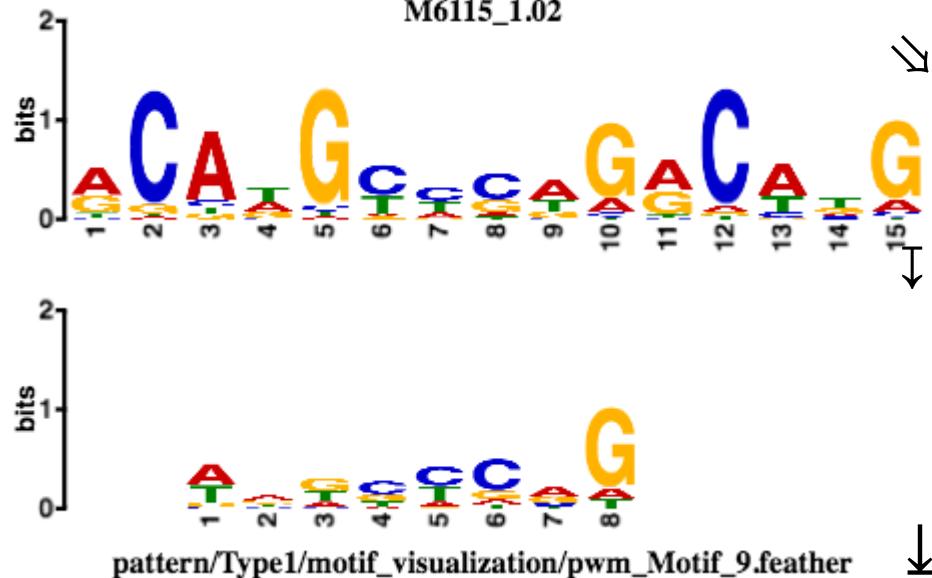
Summary

Alignment

Name	M6115_1.02 (TP73)
Database	Homo sapiens
p-value	6.00e-05
E-value	4.40e-02
q-value	8.79e-02
Overlap	8
Offset	2

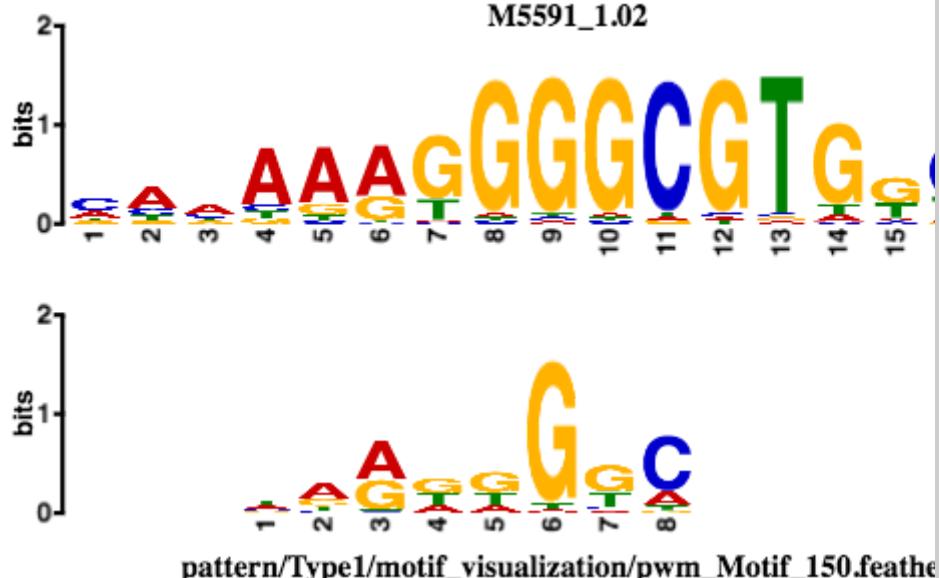
OrientationReverse
Complement[Show logo download options](#)

M6115_1.02

**MATCHES TO PATTERN/TYPE1/MOTIF_VISUALIZATION/PWM_MOTIF_150.FEATHER****(PATTERN/TYPE1/MOTIF_VISUALIZATION/PWM_MOTIF_150.FEATHER)**[Previous](#) [Next](#) [Top](#)**Summary****Alignment**

Name	M5591_1.02 (KLF13)
Database	Homo sapiens
p-value	1.36e-04
E-value	9.97e-02
q-value	1.27e-01
Overlap	8
Offset	3
Orientation	Normal
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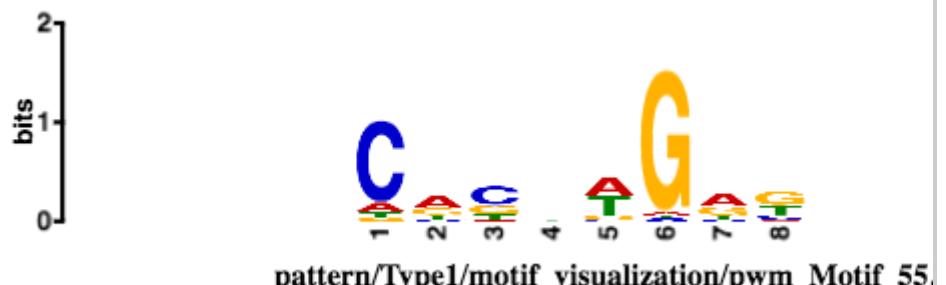
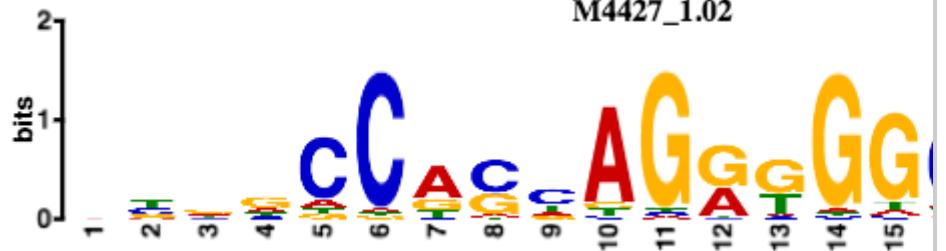
M5591_1.02

**MATCHES TO PATTERN/TYPE1/MOTIF_VISUALIZATION/PWM_MOTIF_55.FEATHER****(PATTERN/TYPE1/MOTIF_VISUALIZATION/PWM_MOTIF_55.FEATHER)**[Previous](#) [Next](#) [Top](#)**Summary****Alignment**

Name	M4427_1.02 (CTCF)
Database	Homo sapiens
p-value	2.52e-05
E-value	1.85e-02

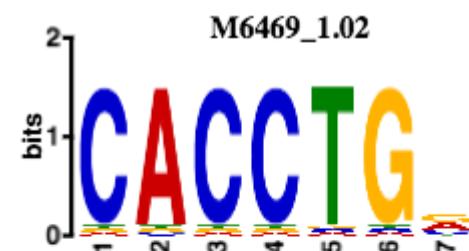
q-value 3.69e-02
Overlap 8
Offset 5
Orientation Normal
[Show logo download options](#)

M4427_1.02

**Summary****Alignment**

Name M6469_1.02
Database Homo sapiens
p-value 9.24e-05
E-value 6.77e-02
q-value 6.77e-02
Overlap 7
Offset 0
Orientation Reverse Complement
[Show logo download options](#)

M6469_1.02



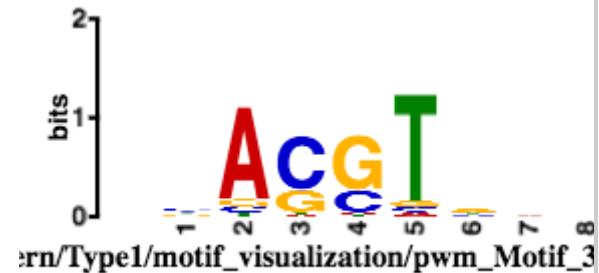
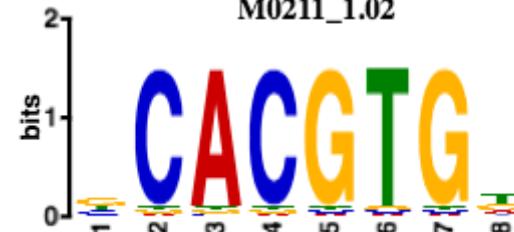
MATCHES TO PATTERN/TYPE1/MOTIF_VISUALIZATION/PWM_MOTIF_300.FEATHER (PATTERN/TYPE1/MOTIF_VISUALIZATION/PWM_MOTIF_300.FEATHER)

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Summary**Alignment**

Name M0211_1.02
((MLXIP) (Mus musculus) (DBD_0.82))
Database Homo sapiens
p-value 2.02e-05
E-value 1.48e-02
q-value 1.58e-02
Overlap 7
Offset 1
Orientation Normal

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M0211_1.02

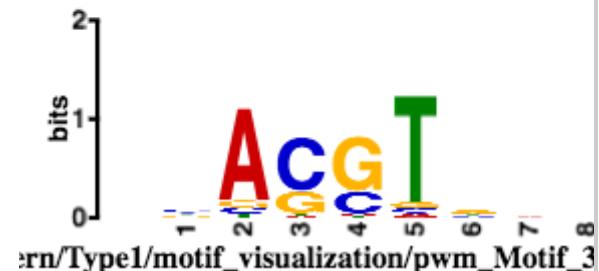
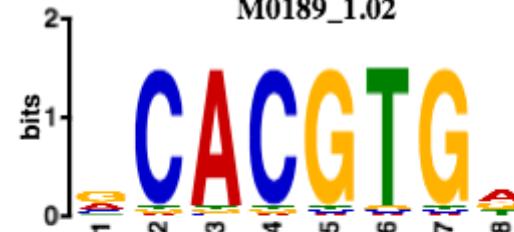


Summary

Name	M0189_1.02 ((ID2) (Mus musculus) (DBD 0.98))
Database	Homo sapiens
p-value	3.19e-05
E-value	2.34e-02
q-value	1.58e-02
Overlap	7
Offset	1
Orientation	Normal

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M0189_1.02

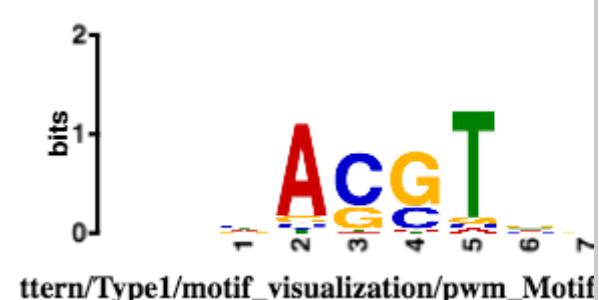
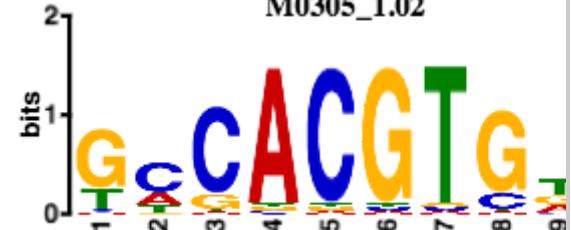


Summary

Name	M0305_1.02 ((CREB3L2) (Mus musculus) (DBD 1.00))
Database	Homo sapiens
p-value	3.33e-05
E-value	2.44e-02
q-value	1.58e-02
Overlap	7
Offset	2
Orientation	Normal

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M0305_1.02



MATCHES TO PATTERN/TYPE1/MOTIF_VISUALIZATION/PWM_MOTIF_78.FEATHER**(PATTERN/TYPE1/MOTIF_VISUALIZATION/PWM_MOTIF_78.FEATHER)**[Previous](#) [Next](#) [Top](#)**Summary**

Name	M4427_1.02 (CTCF)
Database	Homo sapiens
p-value	1.13e-05
E-value	8.25e-03
q-value	4.16e-03
Overlap	8
Offset	10
Orientation	Normal

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Alignment

pattern/Type1/m

Summary

Name	M1906_1.02 (SP1)
Database	Homo sapiens
p-value	1.38e-05
E-value	1.01e-02
q-value	4.16e-03
Overlap	8
Offset	0
Orientation	Normal

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Alignment

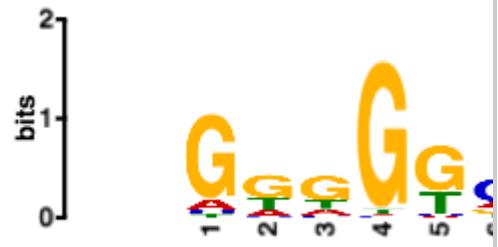
pattern/Type1/motif_visualization/pwm

Alignment**Summary**

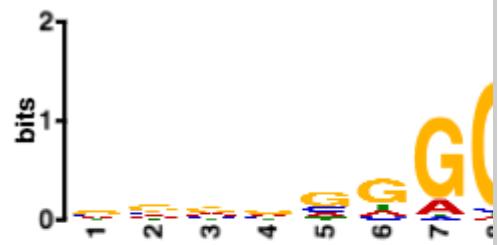
Name	M6535_1.02 (WT1)
Database	Homo sapiens
p-value	1.62e-05
E-value	1.19e-02
q-value	4.16e-03
Overlap	8
Offset	2
Orientation	Normal

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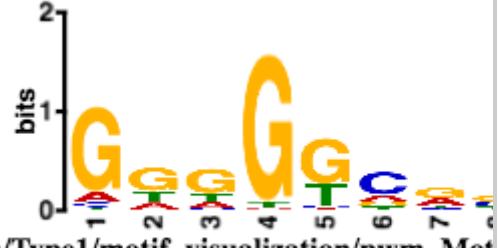
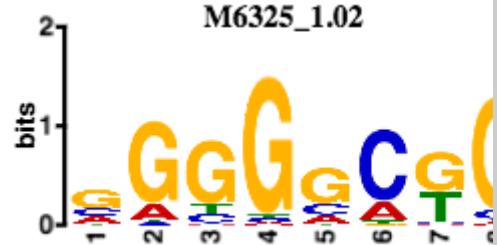
M6535_1.0



pattern/Type1/motif_visualization

Alignment

pattern/Type1/motif_visualization

Alignment**Alignment****Summary**

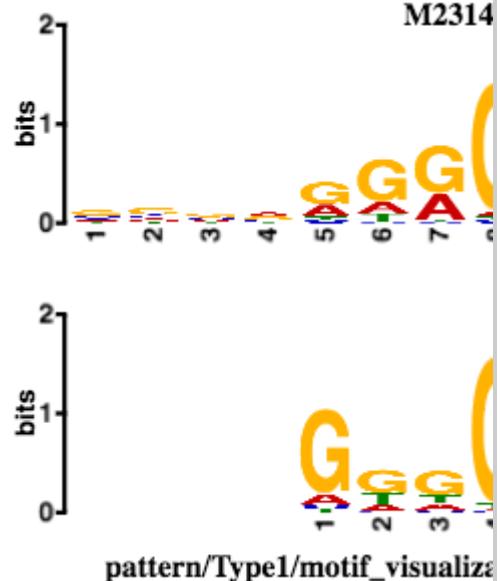
Name	M6482_1.02 (SP3)
Database	Homo sapiens
p-value	1.73e-05
E-value	1.27e-02
q-value	4.16e-03
Overlap	8
Offset	4
Orientation	Normal

[Show logo download options](#)**Summary**

Name	M6325_1.02 (KLF6)
Database	Homo sapiens
p-value	1.76e-05
E-value	1.29e-02
q-value	4.16e-03
Overlap	8
Offset	0
Orientation	Normal

[Show logo download options](#)**Summary**

Name	M2314_1.02(SP2)
Database	Homo sapiens
p-value	2.16e-05
E-value	1.58e-02
q-value	4.16e-03
Overlap	8
Offset	4
Orientation	Normal

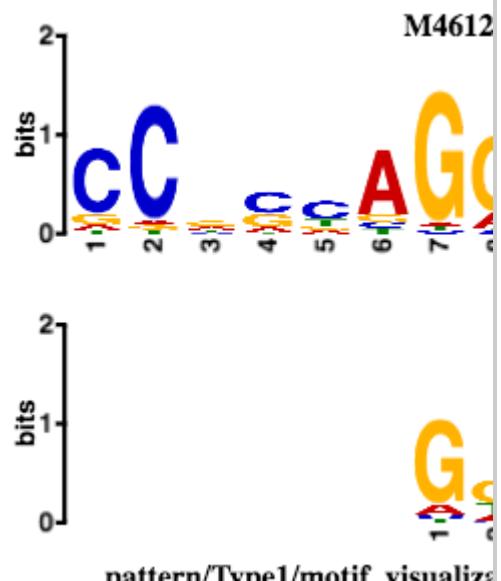
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Summary

Name	M4612_1.02(CTCFL)
Database	Homo sapiens
p-value	2.16e-05
E-value	1.58e-02
q-value	4.16e-03
Overlap	8
Offset	6
Orientation	Normal

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Alignment

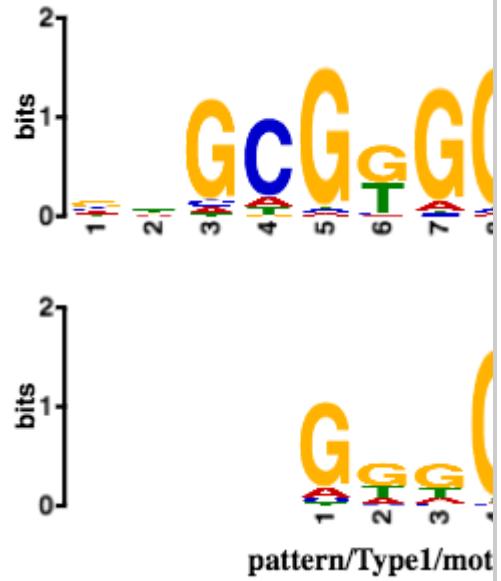


Summary

Name	M4459_1.02(EGR1)
Database	Homo sapiens
p-value	2.34e-05
E-value	1.72e-02
q-value	4.16e-03
Overlap	8
Offset	4
Orientation	Normal

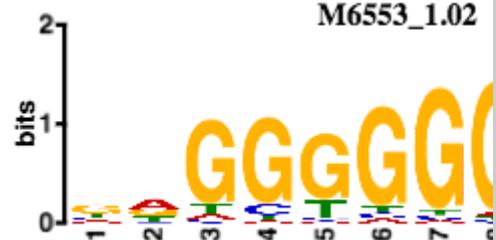
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Alignment



Summary

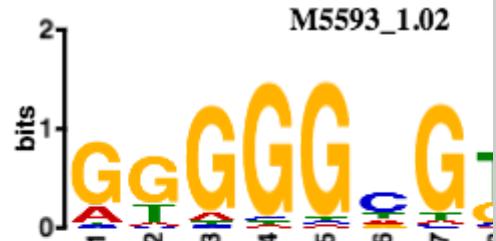
Name	M6553_1.02 (ZNF219)
Database	Homo sapiens
p-value	5.77e-05
E-value	4.23e-02
q-value	9.11e-03
Overlap	8
Offset	3
Orientation	Normal
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Alignment

pattern/Type1/motif_visualization/pw/
Alignment

Summary

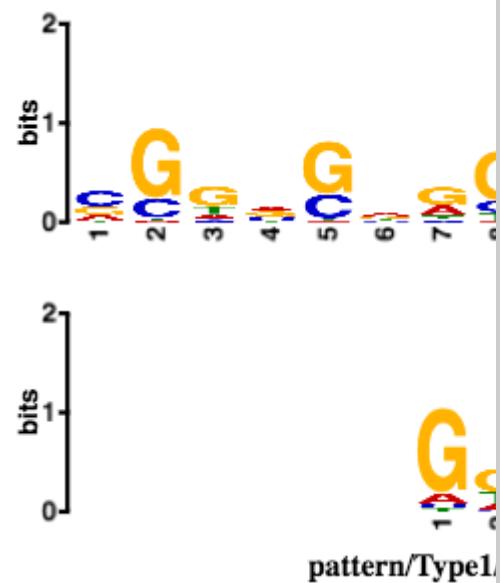
Name	M5593_1.02 (KLF16)
Database	Homo sapiens
p-value	8.22e-05
E-value	6.03e-02
q-value	1.14e-02
Overlap	8
Offset	0
Orientation	Normal
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Alignment

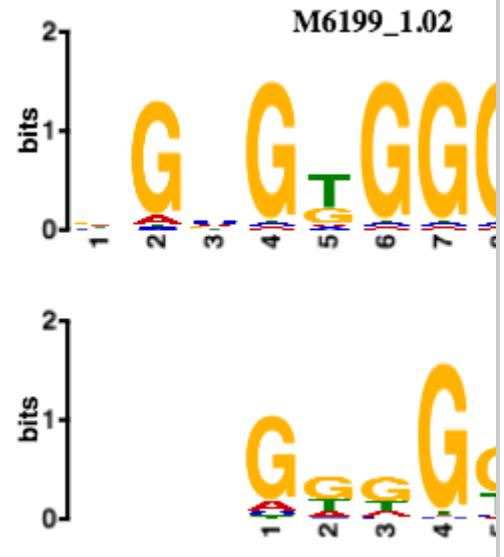
pattern/Type1/motif_visualization/pw/
Alignment

Summary

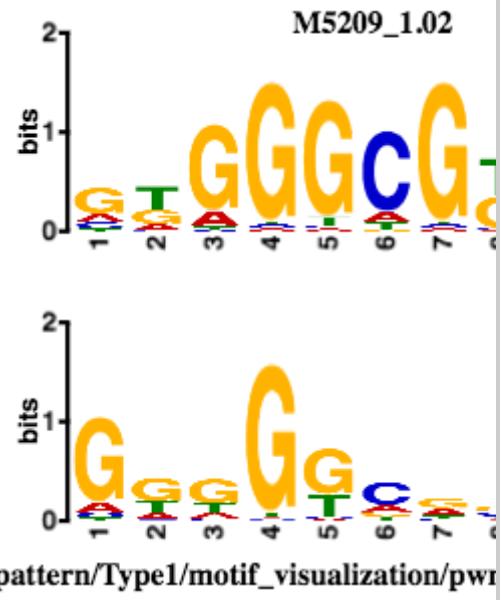
Name	M6539_1.02 (ZBTB7B)
Database	Homo sapiens
p-value	8.92e-05
E-value	6.54e-02
q-value	1.14e-02
Overlap	8
Offset	6
Orientation	Normal
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**Summary**

Name	M6199_1.02 (EGR2)
Database	Homo sapiens
p-value	9.60e-05
E-value	7.04e-02
q-value	1.14e-02
Overlap	8
Offset	3
Orientation	Normal
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Alignment**Summary**

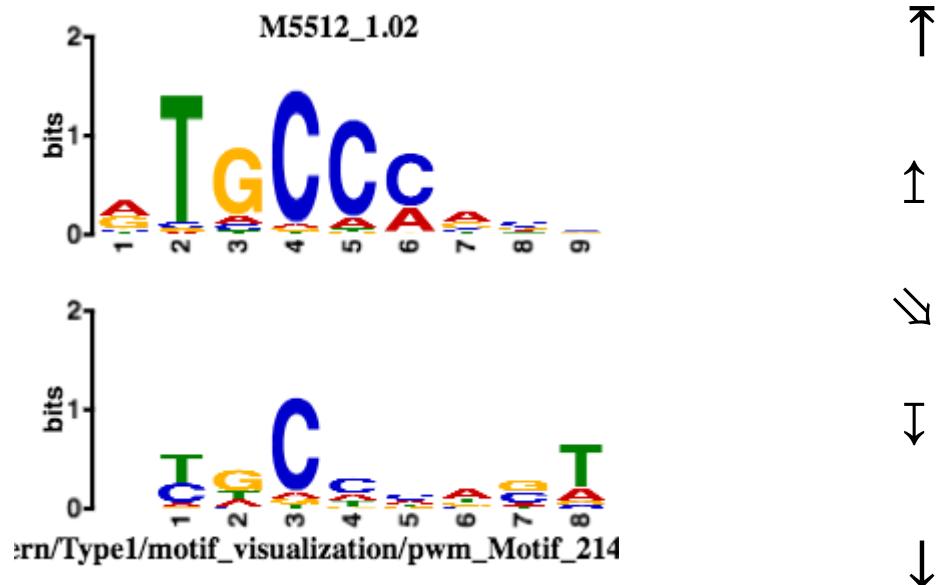
Name	M5209_1.02
Database	((SP5) (Drosophila melanogaster) (DBD_0.93))
p-value	1.12e-04
E-value	8.20e-02
q-value	1.22e-02
Overlap	8
Offset	0
Orientation	Normal
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Alignment

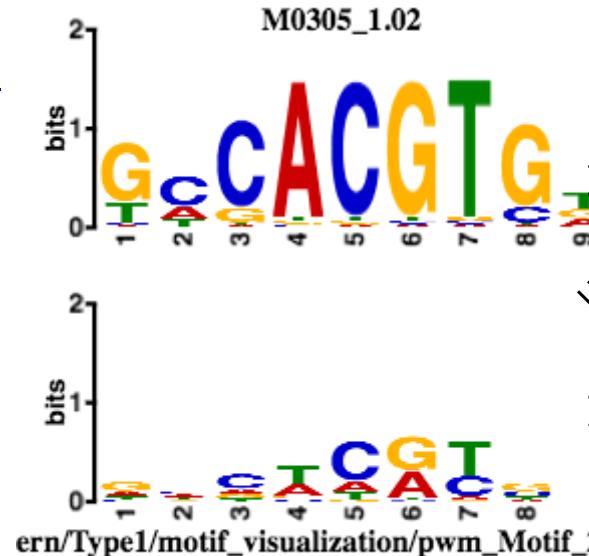
MATCHES TO PATTERN/TYPE1/MOTIF_VISUALIZATION/PWM_MOTIF_214.FEATHER**(PATTERN/TYPE1/MOTIF_VISUALIZATION/PWM_MOTIF_214.FEATHER)**[Previous](#) [Next](#) [Top](#)**Summary****Alignment**

Name	M5512_1.02 (HIC2)
Database	Homo sapiens
p-value	1.21e-04
E-value	8.90e-02
q-value	1.78e-01
Overlap	8
Offset	1
Orientation	Reverse Complement

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**MATCHES TO PATTERN/TYPE1/MOTIF_VISUALIZATION/PWM_MOTIF_22.FEATHER****(PATTERN/TYPE1/MOTIF_VISUALIZATION/PWM_MOTIF_22.FEATHER)**[Previous](#) [Next](#) [Top](#)**Summary****Alignment**

Name	M0305_1.02 ((CREB3L2) (Mus musculus) (DBD_1.00))
Database	Homo sapiens
p-value	1.08e-04
E-value	7.93e-02
q-value	1.06e-01
Overlap	8
Offset	0
Orientation	Normal

[Show logo download options](#)**SETTINGS**[Previous](#) [Next](#) [Top](#)**Background**

Name	Bg.	Name	Bg.
Adenine	0.250	A	~
Cytosine	0.250	C	~
		T	0.250
		G	0.250

Other Settings

Strand Handling	Motifs may be reverse complemented before comparison to find a better match.
Distance Measure	Pearson correlation coefficient
Match Threshold	Matches must have a E-value of 0.1 or smaller.

[Previous](#) [Top](#)**TOMTOM version**

4.11.4 (Release date: Fri Apr 07 18:02:37 2017 -0700)

Reference

Shobhit Gupta, JA Stamatoyannopolous, Timothy Bailey and William Stafford Noble, "Quantifying similarity between motifs", *Genome Biology*, 8(2):R24, 2007.

Command line

```
tomtom -no-ssc -oc . -verbosity 1 -min-overlap 5 -dist pearson -evalue -thresh 0.1 combined.motif_of_interest.meme db/CIS-
```

Result calculation took 8.623 seconds