




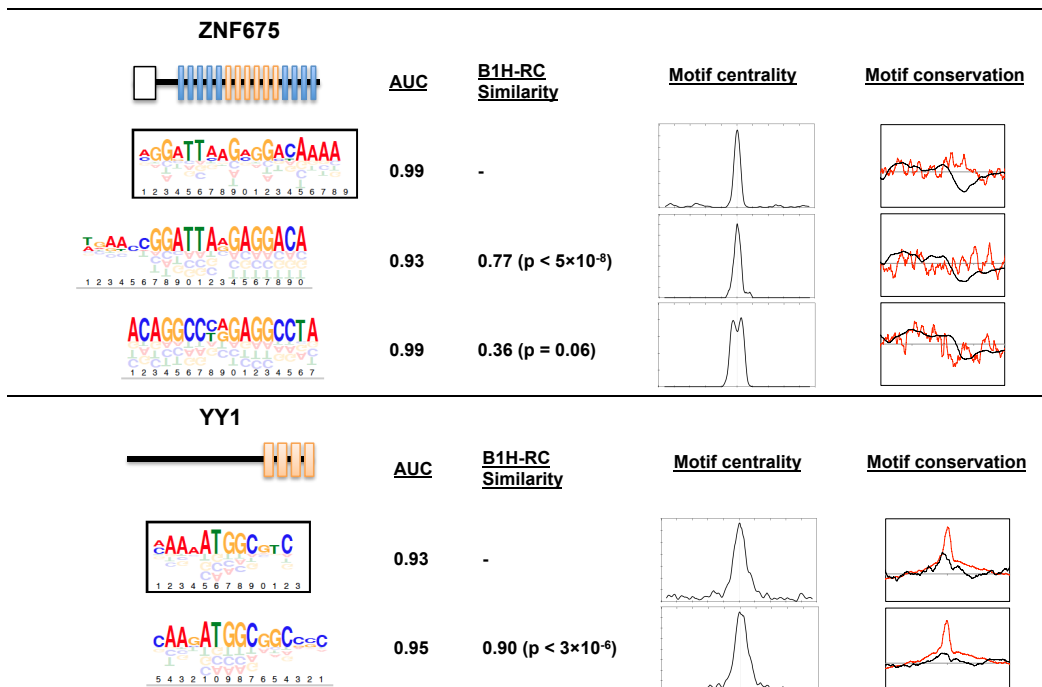
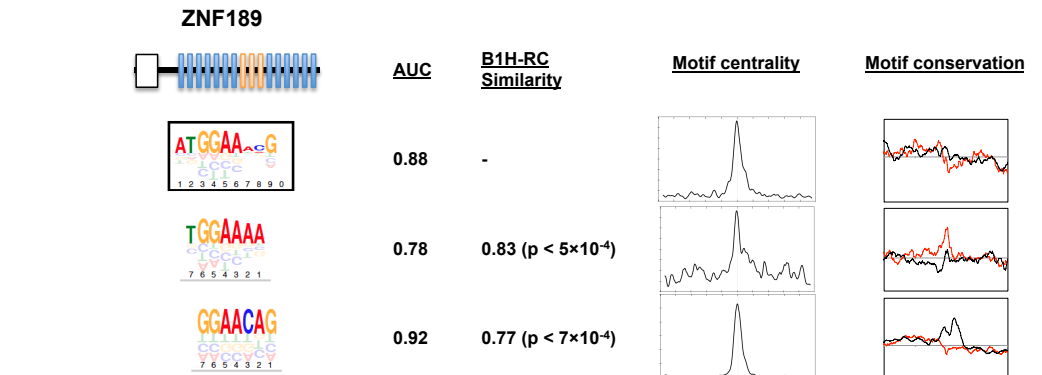
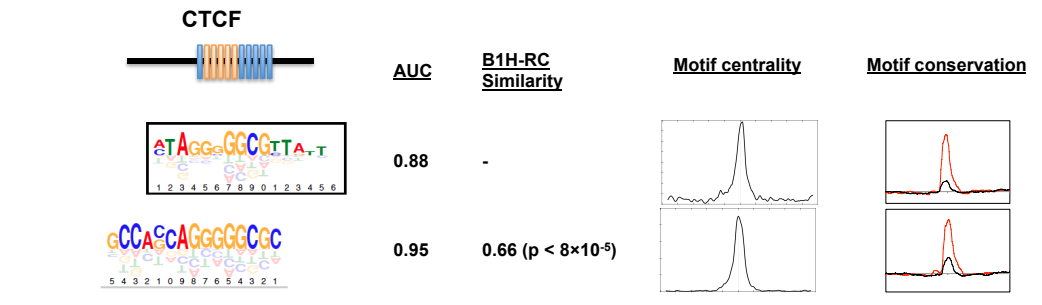
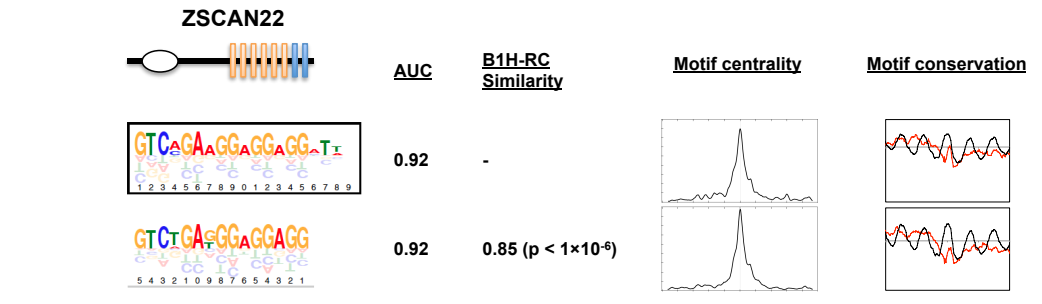
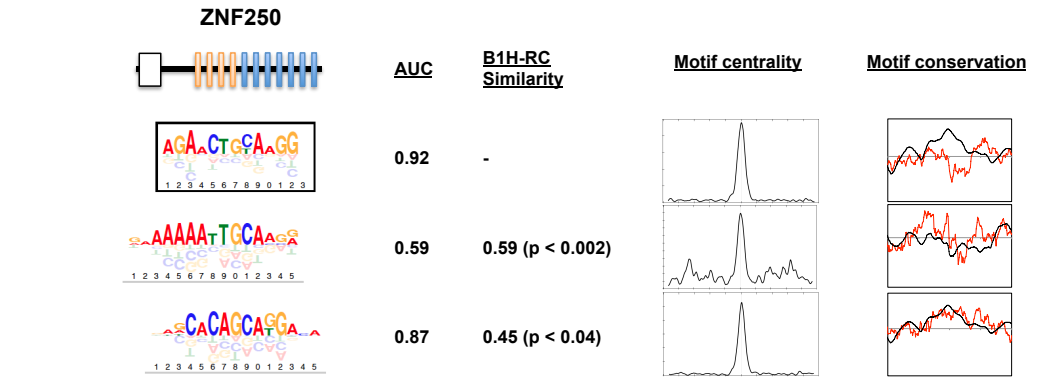
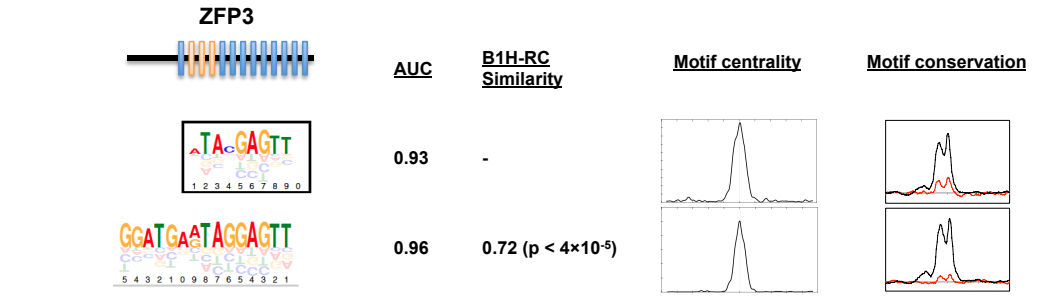
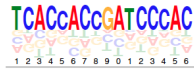
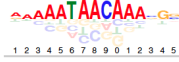
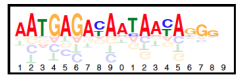


Summary of ChIP-seq results and downstream analysis for 39 human C2H2-ZF proteins. For each protein, the B1H-RC motif is depicted on the top, followed by the best-matching *de novo* motif. If the best-matching *de novo* motif is not the top output of MEME, the top MEME motif is also depicted at the bottom. For each motif, centrality was calculated using CentriMo for the top 500 peaks, including the region [-250,250] around the peak summits. Motif conservation corresponds to the average phastCons score of -100 to +100 bp around the center of motif instances, with the red curve corresponding to motif instances that coincide with at least one ChIP-seq peak in the non-repeat part of the genome, and black curve corresponding to motif instances within ChIP-seq peaks that overlap EREs. Conservation scores are normalized so that, for each curve, the average across regions [-100,-50] and [50,100] is zero, and the standard deviation is one. Protein domain architectures are obtained from UniProt.

-  C2H2-ZF
-  C2H2-ZF corresponding to the B1H-RC motif
-  KRAB
-  SCAN
-  BTB





ZNF382**AUC**

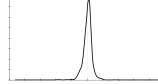
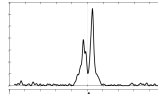
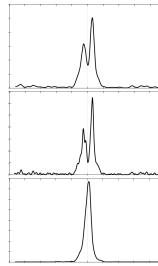
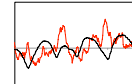
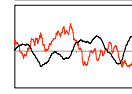
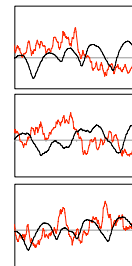
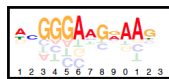
0.86

0.64

0.94

**B1H-RC
Similarity**

-

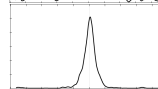
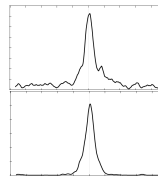
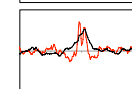
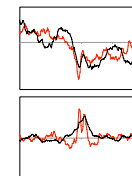
0.51 ($p < 0.005$)0.22 ($p = 0.73$)**Motif centrality****Motif conservation****ZNF528****AUC**

0.83

0.96

**B1H-RC
Similarity**

-

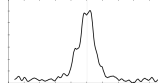
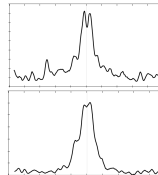
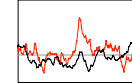
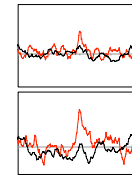
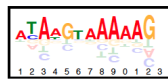
0.57 ($p < 0.002$)**Motif centrality****Motif conservation****ZBTB12****AUC**

0.78

0.87

**B1H-RC
Similarity**

-

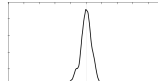
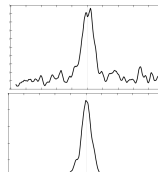
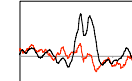
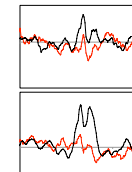
0.80 ($p < 3 \times 10^{-5}$)**Motif centrality****Motif conservation****ZNF35****AUC**

0.78

0.82

**B1H-RC
Similarity**

-

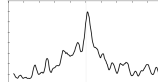
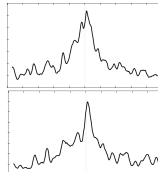
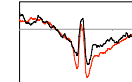
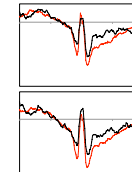
0.65 ($p < 2 \times 10^{-5}$)**Motif centrality****Motif conservation****KLF14****AUC**

0.76

0.77

**B1H-RC
Similarity**

-

0.93 ($p < 4 \times 10^{-6}$)**Motif centrality****Motif conservation**

ZNF467



AUC

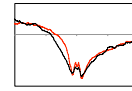
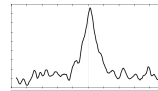
B1H-RC Similarity

Motif centrality

Motif conservation

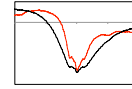
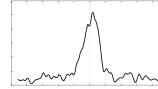
0.76

-

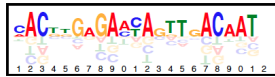


0.76

0.62 ($p < 8 \times 10^{-5}$)



ZNF41



AUC

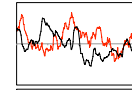
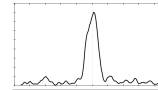
B1H-RC Similarity

Motif centrality

Motif conservation

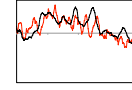
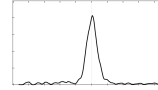
0.75

-



0.89

0.56 ($p < 2 \times 10^{-4}$)



ZNF273



AUC

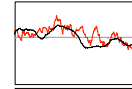
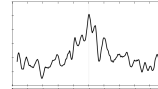
B1H-RC Similarity

Motif centrality

Motif conservation

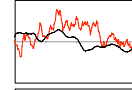
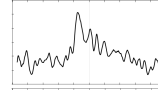
0.75

-



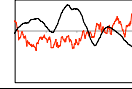
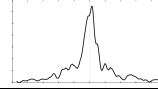
0.57

0.77 ($p < 2 \times 10^{-4}$)



0.91

0.48 ($p = 0.07$)



ZNF669



AUC

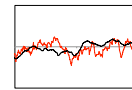
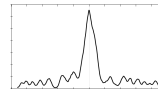
B1H-RC Similarity

Motif centrality

Motif conservation

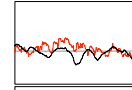
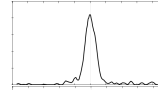
0.75

-



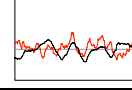
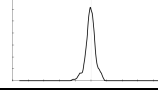
0.78

0.47 ($p < 0.01$)



0.79

0.25 ($p = 0.44$)



KLF10



AUC

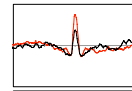
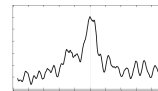
B1H-RC Similarity

Motif centrality

Motif conservation

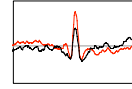
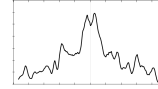
0.73

-



0.77

0.93 ($p < 3 \times 10^{-6}$)



ZNF200



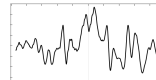
AUC

0.72

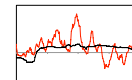
B1H-RC Similarity

-

Motif centrality

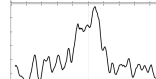


Motif conservation



0.75

0.82 ($p < 5 \times 10^{-4}$)

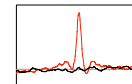
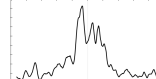


No significant motif hits

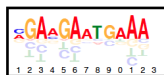


0.81

0.64 ($p < 0.005$)



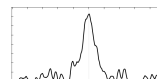
ZNF71



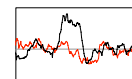
0.72

-

Motif centrality

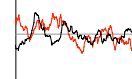
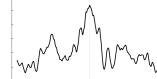


Motif conservation



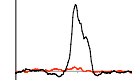
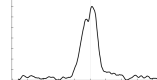
0.71

0.60 ($p < 0.001$)

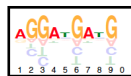


0.74

0.21 ($p = 0.84$)



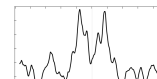
ZNF519



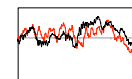
0.71

-

Motif centrality

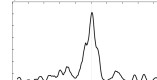


Motif conservation



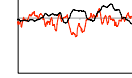
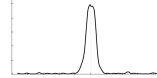
0.73

0.57 ($p < 0.009$)



0.91

0.42 ($p = 0.07$)



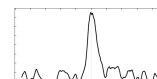
ZNF322



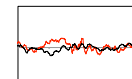
69

-

Motif centrality

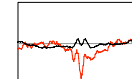
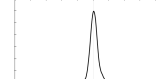


Motif conservation



0.95

0.56 ($p < 2 \times 10^{-4}$)



ZBTB18



AUC

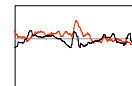
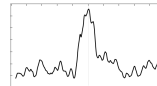
B1H-RC Similarity

Motif centrality

Motif conservation

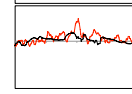
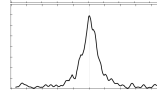
0.68

-

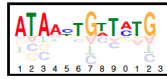


0.66

0.74 ($p < 3 \times 10^{-4}$)



ZSCAN31



AUC

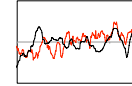
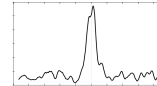
B1H-RC Similarity

Motif centrality

Motif conservation

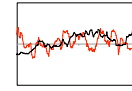
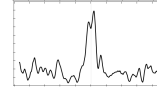
0.68

-



0.58

0.54 ($p < 0.002$)



ZNF574



AUC

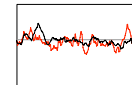
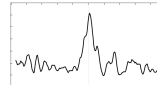
B1H-RC Similarity

Motif centrality

Motif conservation

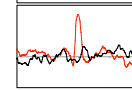
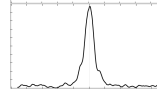
0.67

-

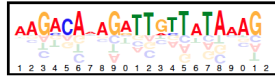


0.86

0.67 ($p < 8 \times 10^{-4}$)



ZNF16



AUC

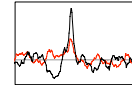
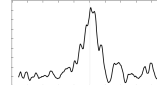
B1H-RC Similarity

Motif centrality

Motif conservation

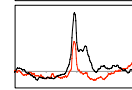
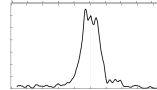
0.67

-



0.72

0.38 ($p = 0.03$)



ZNF264



AUC

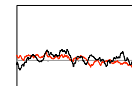
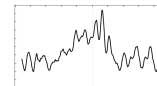
B1H-RC Similarity

Motif centrality

Motif conservation

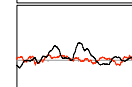
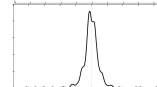
0.67

-

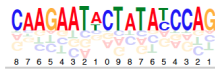
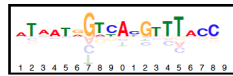


0.89

0.36 ($p = 0.09$)



ZNF136



AUC

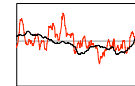
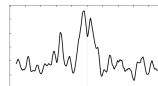
B1H-RC
Similarity

Motif centrality

Motif conservation

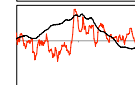
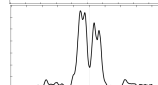
0.67

-



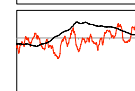
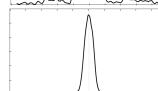
0.83

0.45 (p < 0.005)



0.98

0.28 (p = 0.35)



ZNF45



AUC

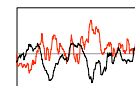
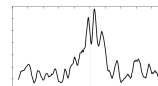
B1H-RC
Similarity

Motif centrality

Motif conservation

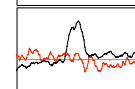
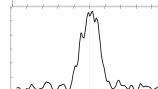
0.66

-



0.65

0.39 (p = 0.03)



MZF1



AUC

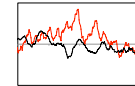
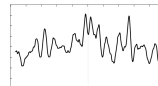
B1H-RC
Similarity

Motif centrality

Motif conservation

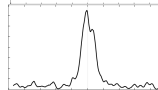
0.64

-



0.85

0.71 (p < 9×10⁻⁴)



No significant motif hits

ZNF33A



AUC

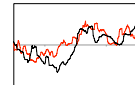
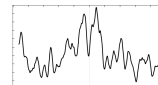
B1H-RC
Similarity

Motif centrality

Motif conservation

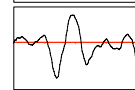
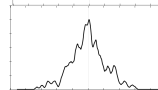
0.64

-



0.70

0.21 (p = 0.78)



ZNF684



AUC

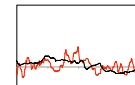
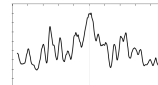
B1H-RC
Similarity

Motif centrality

Motif conservation

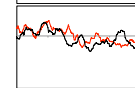
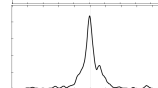
0.63

-

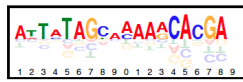


0.83

0.48 (p = 0.02)



ZNF416



AUC

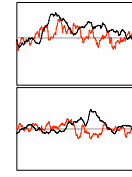
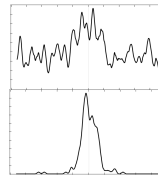
**B1H-RC
Similarity**

Motif centrality

Motif conservation

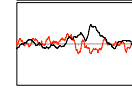
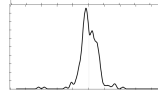
0.62

-



0.79

0.43 (p = 0.01)



ZNF317



AUC

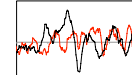
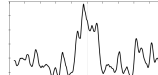
**B1H-RC
Similarity**

Motif centrality

Motif conservation

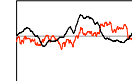
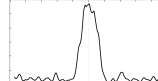
0.62

-



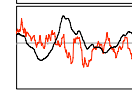
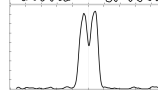
0.77

0.70 (p < 0.002)

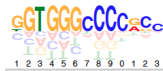


0.96

0.29 (p = 0.36)



ZNF692



AUC

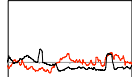
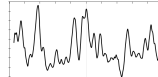
**B1H-RC
Similarity**

Motif centrality

Motif conservation

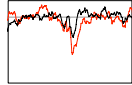
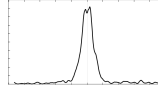
0.61

-



0.87

0.20 (p = 0.93)



ZNF454



AUC

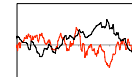
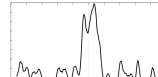
**B1H-RC
Similarity**

Motif centrality

Motif conservation

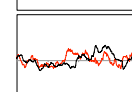
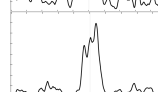
0.61

-



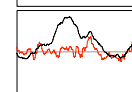
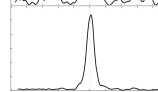
0.66

0.50 (p < 0.008)

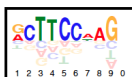


0.91

0.27 (p = 0.33)



ZIC2



AUC

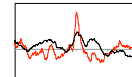
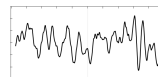
**B1H-RC
Similarity**

Motif centrality

Motif conservation

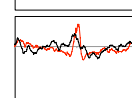
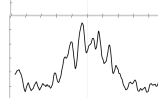
0.57

-



0.72

0.35 (p = 0.31)



ZNF415



AUC

B1H-RC
Similarity

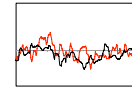
Motif centrality

Motif conservation

0.58

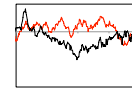
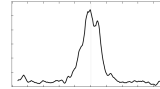
-

No significant motif hits



0.86

0.54 (p = 0.01)



ZNF621



AUC

B1H-RC
Similarity

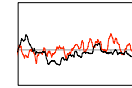
Motif centrality

Motif conservation

0.53

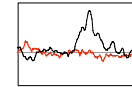
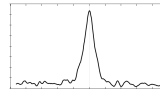
-

No significant motif hits

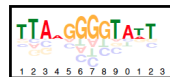


0.82

0.19 (p = 0.94)



ZNF653



AUC

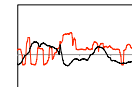
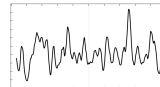
B1H-RC
Similarity

Motif centrality

Motif conservation

0.51

-



0.67

0.24 (p = 0.62)

