

Figure S13. Human-mouse-fugu alignment and predicted TFBS of CNE6.

TFBS on the forward strand are shown in blue and TFBS on the reverse strand are shown in red below the human-mouse-fugu sequence alignment. The binding TF and position weight matrix similarity score are listed next to each predicted site. Sequence enclosed in blue box is an instance of a motif over-represented in the CNEs of central nervous system-expressed TF-encoding genes. Motif numbers are listed and described in Table 3.

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human   CAACTT--TCACTGACTAGAGTTTTCAAGGAGCTATGAATGAGTTAACAAGGAGGTCT 58
mouse   CAACTT--CCACTGACTAGAATTTTCAAGGGGCTGTGAATGAGTTAACAAGGAGGTCT 58
fugu    CAGCTTTCTCCCTACTCACAGTTCACAGAGAGTCTGAATGAGATTAACAAGGAGGTCT 60
          aggagctatgAATGagt 0.919  HMGA.01
          gagctatgAATGagttt 0.935  HBP1.01
          ctatgAATGagtttaac 0.967  NANOG.01
          agtttaaCAAAGgaggt 0.936  LEF1.01
          aacAAAGgaggtc 0.966  GKLF.02

human   GT-GGCTAGTTTCTGGCTGAAGTCCATGTCAACAGTTTTTAAGGTCACAGGCCACACTAA 117
mouse   GT-GGCTAGTTTCTGGCTGAAGTCCATGTCAACAGTTTTTAAGGTCACAGGCCACACTAA 117
fugu    GTCAGACCCCTCTTGGCCAGGTTCCACGTCAACAGCTCACAGGGTCAAGGGTCACACTAA 120
          agtttttaAGGTCacagggcaca 0.96  VERBA.01
          agtttttaAGGtcacaggc 0.916  ERR.01
          ttttAAGGtcacagg 0.927  NBRE.01

human   CTAACATTTATTCCCAGCAGACCC--TGTTCTAAACACAAGCTGTAAGTAGTACAAATTT 175
mouse   CTAACATTTATTCCCAGCAGACCC--TGTTCTAAACACAAGCTGTACATAGTACAAATTT 175
fugu    CT-ACATTCATTCCCAGCAGACCCTTTGGTCCAAAACACAGGCTGCCAGTCACACAAACTC 179
          taACATttatt 0.979  SMARCA3.01
          ccagcagacc--TGTtctaa 0.907  PRE.01
          t... 0.922  MTBF.01

Motif #1
human   GGAATTTTT-CTGTAATCCCTTGAGATATTCCTGATCCTTCCACATGTTTCTGCTCAATT 234
mouse   GAAATTTTT-CTGTAATCCCTTGAGATATTCCTGATCCTTCCACATGTTTCTGCTCAATT 234
fugu    TCAGTTTTTCTCTAATCCCTTGAGATATGTCTGATCTCTCCACATGTTTCTGCTCAATT 239
          ...ggaATTTt 0.922  MTBF.01
          t-ctgTAATcccttgaga 0.982  GSC.01
          tcctgatoCTTCcacatgtttctgc 0.922  HSF2.01
          cttCCACatgtttctgctc 0.903  PAX6.04
          cacatGTTTctgc 0.986  AREB6.04
          ttctgctcaATT... 0.972  BARX2.01
          tgctcaaATT... 0.923  HMX3.02
          gctcaATT... 0.957  BRIGHT.01
          gctcaATT... 0.926  NKX61.01
          tcaaTT... 0.92  HMX3.02

human   AAAAACAAT 243
mouse   AAAAACAAT 243
fugu    -AAAGCAAT 247
          ...Aaaaa 0.972  BARX2.01
          ...Aaaaac 0.923  HMX3.02
          ..Aaaaa 0.957  BRIGHT.01
          ...AAa 0.926  NKX61.01
          ...AAaacaat 0.92  HMX3.02

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