

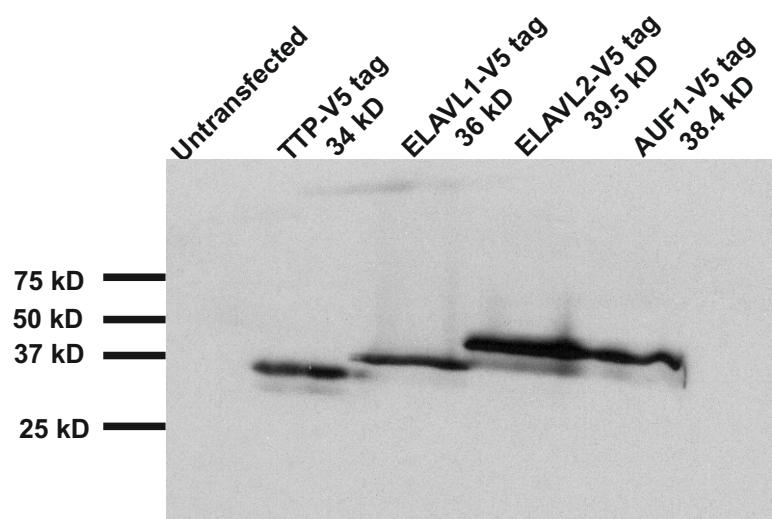
Kumar et al. Supplementary Table 1

List of cloning and Q-PCR primers

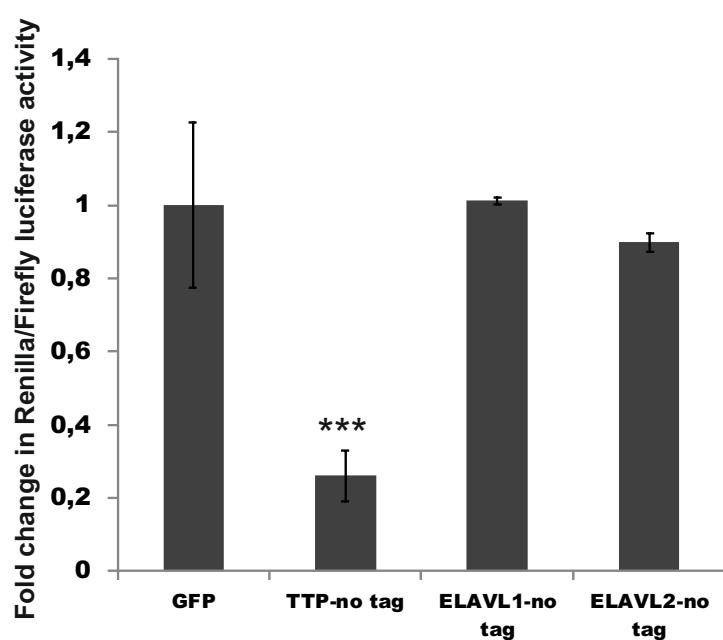
Primers for cloning	Forward Primer	Reverse primer
<i>BDNF long 3' UTR-XbaI</i>	5'-TATTCTAGAACTGACCATTAAAAAGGGGA AGATAGTGG-3'	5'-AAATCTAGATTACAATAGGCTCTGAT GTGG-3'
<i>BDNF short 3' UTR-XbaI</i>	5'- GCATCTAGATGGATTATGTTGTATAGATTATAT- 3'	5'- CAGTCTAGAATCTGTTCTGAAAGAGGGAC- 3'
<i>U1 fragment-XbaI</i>	5'- GCATCTAGATGGATTATGTTGTATAGATTATAT- 3'	5'-AAATCTAGAGGTCATGGATATGTCCAA TAAAT-3'
<i>U2 fragment-XbaI</i>	5'-CGC TCT AGA GGA AAC AGT CAT TTG CGC A-3'	5'- CAGTCTAGAATCTGTTCTGAAAGAGGGAC- 3'
<i>TNF ARE-XbaI</i>	5'-TTTCTAGAACGCCCTCCTCACAGAGCCAG-3'	5'-CCCTCTAGAGAACAGCTTCCCACAC TG-3'
Primers for Q-PCR	Forward Primer	Reverse primer
<i>Mus musculus ZFP36/TPP</i>	5'-TCTCTCACCAAGGCCATT-3'	5'-ATCGACTGGAGGCTCTCG-3'
<i>Mus musculus ZFP36L1/BRF1</i>	5'-GCACAAGCACAACTTCCGT-3'	5'-AATTGCAAGCGTGGAGGTTG-3'
<i>Mus musculus ZFP36L2/BRF2</i>	5'-GCACAAGCACAACTTCCGT-3'	5'-AATTGCAAGCGTGGAGGTTG-3'
<i>Mus musculus actin, beta</i>	5'-CCAGTCGCCATGGATGAC-3'	5'-GAGCCGTTGTCGACGACC-3'
<i>Mus musculus BDNF (CDS, transcript variants 1-4)</i>	5'-TACCTGGATGCCGAAACAT-3'	5'-GCTGTGACCCACTCGCTAAT-3'

Kumar et al. Supplementary Figure 1

a.



b.



Kumar et al. Supplementary Figure 2

Mouse Bdnf 3'UTR sequence. Location of AUUUA motifs is indicated by red, UAUUUAU motifs are red in italics; the sequence of BDNF-S is bold and underlined.

1412 **UGG**AUUUAUGUUGUAUAGAUUAUUGAGACAAAAAUUACAUUUGUAUAUACAUACAGGUAAAUAUUCAGUUA
1492 GAAAAAAUAAUAAAUAUGAACUGCAUGUA*AAUAGAAGUUUAUACAGUACAGUGGUUCUACAACU***UAUUUAU**GGACAUUA
1572 CCAUGACCUGAAAGGAAACAGUCAUUGCGCACAACUUAAAAGUCUGCAU*ACAUUCCUGCAUAAGU*UUGUGGUUJGUU
1652 GCCGUUGCCAAGAAUUGAAAACAAAAGUUAAA*AAUAAAAGCAUGCUGCUUAAAUGUGA*UUGAUUUGAUAAA
1732 AAACUGUCCCUCUUUCAGAAA*ACAGAU*AAAAACAAA*ACAAAAACAAAAACAAAAACAAAAACAAAAACAAAAACAAAAUUGGA*
1812 ACCAAA*ACAUUCGUU*UACAUUUAGACACUAAGUA*UCUUCGUU*UAGUACU*CUGU*UACUGCUUUCGACUUCUG
1892 AUAGCGUUGGAUAAA*ACAAUGUCAAGGUGCUGU*UCAU*UCCUGU*ACUGGC*GAAGGGACGGGAAUGGGAGGGUAG*
1972 AUUUCUGUUU*UUGUUU*UUGUUU*UUGUUU*UUGUUU*UUGUUU*UAGU*UCCACCCGAGUAGGGAU*UAGGGAGGAAAA
2052 UUU*CUUCACAUUCCAUU*UCCGUU*UAGUAAAAGCGU*UACAUU*UUGUAGU*UAGUUGUUAGCAAA*UCCAAUCAGAUGACU*
2132 GGAAA*ACAAUAAA*UAAA*UAGGCAACUGAAUAAA*UAGCUCACACUCCACUG*CCCAGUAGU*UACUCCUGGUCCCCCUA
2212 GCUCACU*CUUCCUGGCAU*GGG*UAGGGAAAU*U*GC*UUU*UAGGAAAGACAGCAGCAU*U*UUGU*UCAAGCAUACU*CUUCCCCU*C
2292 CCUCU*CCCCAUU*U*UUGGUCCUUCUUU*U*UUGUUU*U*UAGAAAGAAA*U*UAGUUGCGC*U*UUAAA*U*UUUUACUAC*
2372 UGC*UACAAACAGAUGAACAAU*U*UAGUGUGCU*U*UUAUGACACUCAUGGAAACAGUGA*U*UUUUUUACCCUAAAGAAAAC*
2452 AAA*AAAAAAUACCCAAA*U*UUCUUUUU*U*UAAAAGGC*U*UAAAUU*U*UUGGUAAA*U*UUGUAAU*U*UAGGCCUACAGUGUUUGC*
2532 AGAUAAA*AGUUAUUGUAUAC*CC*AGAUACUUA*U*UAGAUAGAGCAGGGAUCCACACUGCCAU*U*UAGAAA*U*UAGGACUGAAU*GGCC
2612 CUGCGGAG*GAUAGUGGAGCUGACAUACU*U*UUCUGGCA*G*UAGCAGGAGGAAUUCUGA*U*UAGUGGCCAU*CC*UAGGUAGC*UAGG
2692 AUGGAG*GGGGAAUGGUACU*U*UUGAGACAU*U*UCCUAAGAGGA*U*UAGGCUCGGA*AG*ACCCUUCAGAGCAGG*C*UCCUGGA*AUGAUGU
2772 GUCAAGU*UUGCUUAGGCCUUCUGCUU*U*UAGU*U*UACUACAGUGCU*U*UAGGCU*U*UUCG*U*UUGGAGAAC*ACAC
2852 UCAA*UCCAUU***AUUA**U*AGGCCAUCCAUU*U*UUCUAAU*U*UUGUGUAAAAGU*U*UUGGUAC*U*UCCUGGAGCA*U*UUUGGAUCC*
2932 AAUAUGGC*ACAGCAUAAUAGAU*U*UUAUGCAGCAUGA*U*UAGGGAAU*U*UUGCUGUGA*AG*AGAAUUGAU*U*UUGGUU*U*UAGCUU*
3012 AGACU*UUCAGGAAGCCUAGGU*U*UUUU*U*UUUU*U*UUUU*U*UAGGACAU*U*UUUU*U*UAGGAAAGGAAA*ACAA*ACAAACA*
3092 AACAA*ACAAACAGAAAAGCAU*AA*ACUACAGCAGAAUUGAGCA*U*UAGCUGAAAGGGCU*AG*AGGGCUAGAAA*ACAGACAUAGCA
3172 AGGUG*CUUUCACUGUGAAAGAGACAAGAACACAGGAGGAAAUU*U*UUGCUCUAGUGA*AG*AGAGCACAGACGGCUCCUGCC***AU**
3252 **UAU**U*ACAAGAGUCCGUCGUACUUUACCUU*U*UUGGGU*U*UAGUAGC*U*UAGUUGGA*AG*CCUGAAUGGACCCAU*U*UAGAGA*
3332 ACUAGGU*UUAAGCCCAUUC*U*UCCUAGCAGGU*U*UUUU*U*UCAAGCGUGA*U*UAGGUAGUGGU*U*UACUCUCCUGGGU*U*UCCUGAGC*
3412 AUCAG*AAAAAAAGAGGCAAACAAUCGCUUCAUCU*U*UAGGAGUGGAAAGGAAACAGAAGUGGACGUCCG*C*UUG*
3492 ACUCAGGGAG*UAGAUACCAUCAGCAA*U*UAGUUU*U*UUUUUGU*U*UCAUCUUCGAGU*U*UAGCCUGU*UUU*UUGGAA*
3572 UACCACUGAA*UAGCUGUUU*U*UUGAAAGACUUCAGUAGCAUAGAU*U*UUGUUUUGUGCC*U*UUCACCAAA*U*UACCUU*U*UUGUCAU*
3652 CGUUUUU*UACCUUACAGGA*U*UAGCUUAGCUCU*U*UAGGUACU*U*UUUUUGCAGCUUCAUUCUGAGU*U*UAGCCUGU*UUU*UUGGAA*
3732 CAA*ACAAACAAAGGAUCCCAUCAACAUU*U*UACAGUACUGCAAGGCCAGGU*U*UUCAGCGUUCACAGGAGACAU*
3812 AGCA*UUCAGGUGGU*U*UAGGGCUCU*U*UACCCACUAAGAU*ACAU*UAGCUACAGU*U*UAGGUGGU*U*UAGUUGAC*U
3892 AG**AUUA**U*UUGUUAAAACUCUUCUUCGUUUCGUU*U*UUCUGUUC*U*UCCUGUUCUUCGUU*U*UUGGUU*U*UUGGUU*
3972 AAGCU*UUCUGUGGU*U*UCCUUCGUU*U*UUGGCAGAAUUGUUU*U*UAGCAUGCAGGCC*U*UCCUGU*UUU*UUAUGUGAU*U*UCCAU*
4052 UGAAACUG*UAGUAAAUGUGUGGCCUUCU*U*UUCUCU*U*UAGGUAAAGAU*U*UUAUCACCA*U*UAGUAAA*ACAA*AGAAAAAA***UAU**
4132 **UUAU**U*UUGU*U*UUUUAGU*U*UAAUUAU*U*UAGU*U*UUUUAGGCAU*U*UAAAACU*U*UACCACAU*U*UAGAAGCC*U*UAU*
4212 UAAA*UACAGGUUUCU***AUUA**U*UAGGUACCA*U*UUAACAU*U*UAAUUAU*U*UAGU*U*UUUUAAUAGA*U*UUUUAAUAGU*U*UUUUAAU*
4292 AUUU*UCAAAGU*

Kumar et al. Supplementary Table 2
 BDNF is co-expressed with ARE-BP-s in various tissues with known BDNF function.

mRNA	Brain*	Skeletal muscle	Heart**	Monocytes
BDNF	Yes	Yes	Yes	Yes
TTP	Yes	Yes	Yes	Yes
BRF1	Yes	Yes	Yes	Yes
BRF2	Yes	Yes	Yes	Yes
ELAVL1	Yes	Yes	Yes	Yes
ELAVL2	Yes	Yes	Yes	Yes
AUF1	Yes	Yes	Yes	Yes

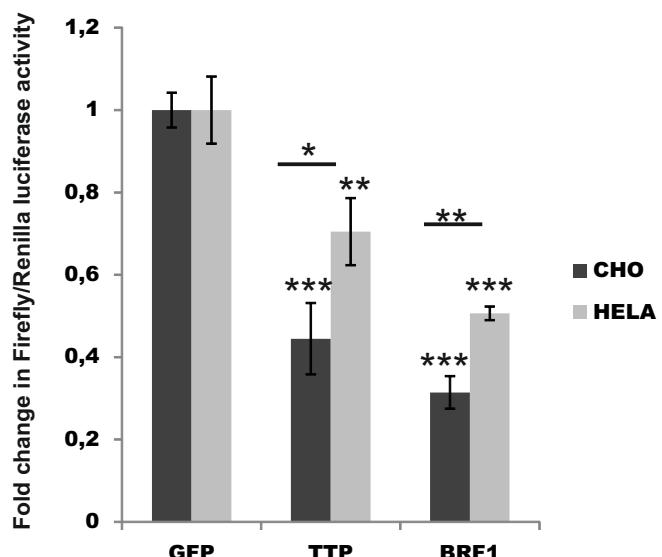
* BDNF is co-expressed with TTP, BRF1, BRF2, ELAVL1, ELAVL2 and AUF1 in prefrontal cortex, cingulate cortex, parietal lobe, temporal lobe, occipital lobe, ciliary ganglion, cerebellar penducles, globus pallidus, olfactory bulb, thalamus, hypothalamus, subthalamic nucleus, caudate nucleus, amygdala, pons

** BDNF is co-expressed with TTP, BRF1, BRF2, ELAVL1, ELAVL2 and AUF1 in heart and in primary human cardiac myocytes

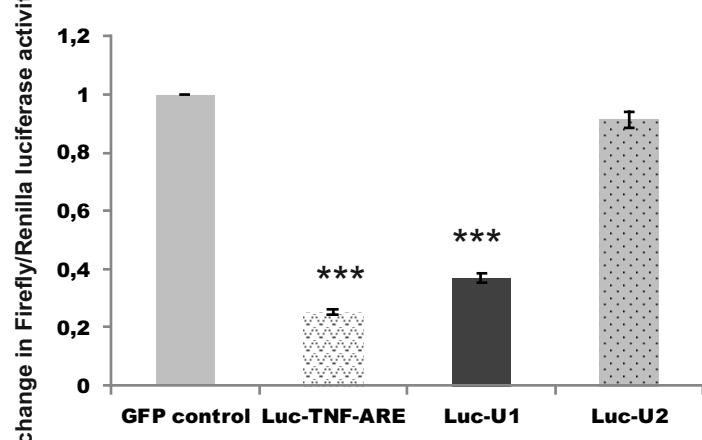
SOURCE: www.Genecards.org

Kumar et al. Supplementary Figure 3

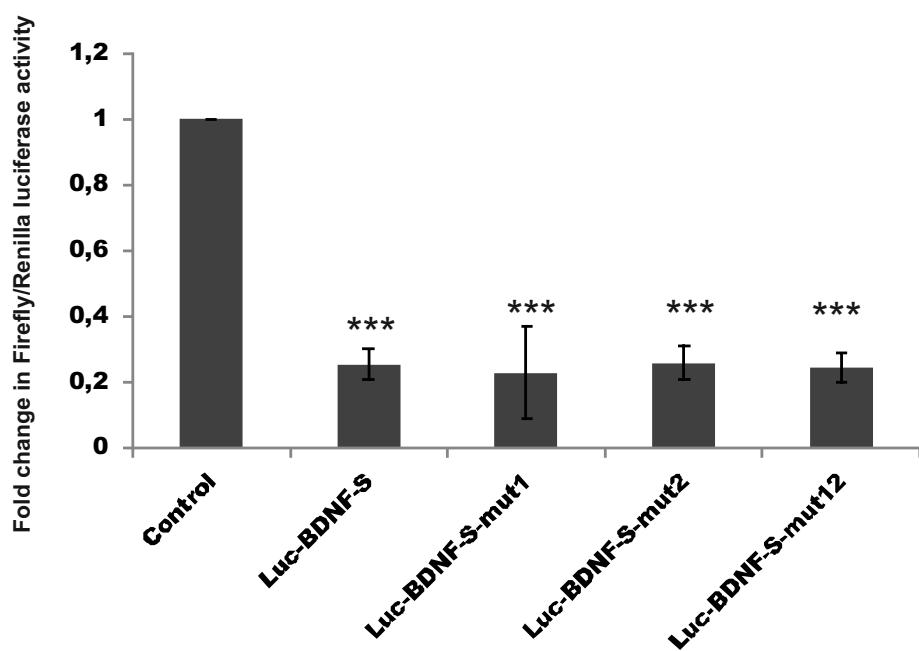
a.



b.

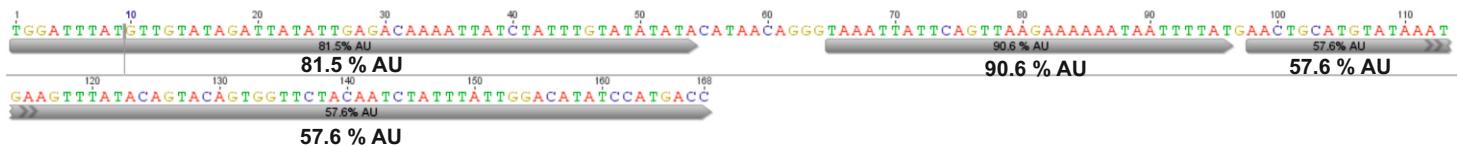


c.

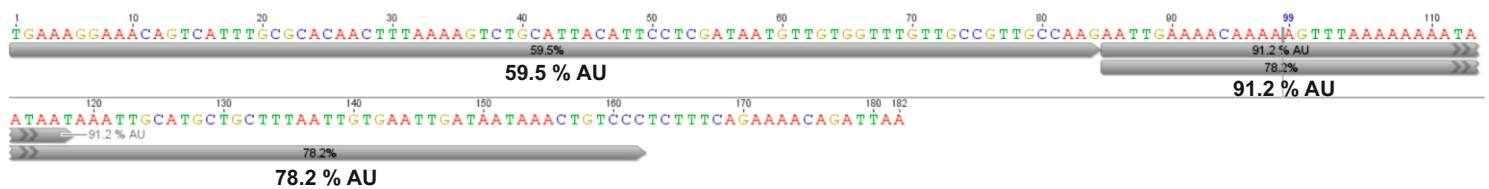


Kumar et. al. Supplementary Figure 4

U1



U2



TNF alpha ARE

