

Product datasheet for MC227200

Atf4 (NM_001287180) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Atf4 (NM_001287180) Mouse Untagged Clone
Tag: Tag Free
Symbol: Atf4
Synonyms: Atf-4; C/ATF; CREB2; TAXREB67
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC227200 representing NM_001287180
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACCGAGATGAGCTTCCTGAACAGCGAAGTGTGGCGGGGACTTGATGTCCCCCTTCGACCAGTCCG
 GTTTGGGGGCTGAAGAAAGCCTAGGTCTCTTAGATGACTATCTGGAGGTGGCCAAGCACTTGAAACCTCA
 TGGGTTCTCCAGCGACAAGGCGGGCTCCTCGGAATGGCCGGCTATGGATGATGGCTTGGCCAGTGCCTCA
 GACACCGCAAGGAGGATGCCTTTCCGGGACAGATTGGATGTTGGAGAAAATGGATCTGAAAGAGTTTG
 ACTTCGATGCTCTGTTTCGAATGGATGACCTGGAACCATGCCAGATGAGCTCTTGACCAGTGGATGA
 CACATGTGATCTTTTTGCCCTCTAGTCCAAGAGACTAATAAGGAGCCCCCTCAGACAGTGAACCAATT
 GGCCATCTCCAGAAAAGTTAATAAAAAGTCGACCAGGTTGCCCTTTACATTCTTGACGCTTTCCCT
 GTTCCCCAGGGTTCTGTCTTCCACTCCAGAGCATTCCCTTAGTTTAGAGCTAGGCAGTGAAGTTGATAT
 CTCTGAAGGAGACAGGAAGCCTGACTCTGCTGCTTACATTACTCTAATCCCTCCATGTGTAAGGAGGAA
 GACACTCCCTCTGACAAATGACAGTGGCATCTGTATGAGCCAGAGTCTACCTGGGCTCCTCCAGCATA
 GCCCTCCACCTCCAGGGCCCCACCAGACAATCTGCCTTCTCCAGTGGTTCCTCCGCTCCTCCGCCC
 CAAACCTTATGACCCACCTGGAGTTAGTTTGACAGCTAAAGTGAAGACTGAGAAAATTGGATAAGAAGCTG
 AAAAAGATGGAGCAAAACAAGACAGCAGCCACTAGGTACCGCCAGAAGAAGCGGGCTGAGCAGGAGGCC
 TCACTGGCGAGTGAAGGAGCTAGAAAAAAGAATGAGGCTCTGAAAGAGAAGGCAGATTCTCTGCCAA
 GGAGATCCAGTATCTGAAAGACCTGATAGAAGAGGTCCGTAAGGCAAGGGGAAGAAGAGAGTTCCG**TAA**

ACGGTACGGCGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_001287180



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Insert Size:	1050 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none"> 1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	<u>NM_001287180.1</u> , <u>NP_001274109.1</u>
RefSeq Size:	1463 bp
RefSeq ORF:	1050 bp
Locus ID:	11911
UniProt ID:	<u>Q06507</u>
Cytogenetics:	15 37.85 cM
Gene Summary:	<p>Transcriptional activator. Binds the cAMP response element (CRE) (consensus: 5'-GTGACGT[AC][AG]-3'), a sequence present in many viral and cellular promoters. Binds to asymmetric CRE's as a heterodimer and to palindromic CRE's as a homodimer. Cooperates with FOXO1 in osteoblasts to regulate glucose homeostasis through suppression of beta-cell production and decrease in insulin production. Regulates the induction of DDIT3/CHOP and asparagine synthetase (ASNS) in response to ER stress. In concert with DDIT3/CHOP, activates the transcription of TRIB3 and promotes ER stress-induced neuronal apoptosis by regulating the transcriptional induction of BBC3/PUMA. Activates transcription of SIRT4. Regulates the circadian expression of the core clock component PER2 and the serotonin transporter SLC6A4. Binds in a circadian time-dependent manner to the cAMP response elements (CRE) in the SLC6A4 and PER2 promoters and periodically activates the transcription of these genes. [UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (2) lacks an internal segment in the 5' UTR, compared to variant 1. Both variants 1 and 2 encode the same protein.</p>