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Product datasheet for SC210467

ATF5 (NM_012068) Human 3' UTR Clone

Product data:

Product Type: 3' UTR Clones

Product Name: ATF5 (NM_012068) Human 3' UTR Clone

Vector: pMirTarget (PS100062)

Symbol: ATF5

Synonyms: ATFX; HMFN0395

ACCN: NM_012068

Insert Size: 873 bp

Insert Sequence:

>SC210467 3'UTR clone of NM_012068
The sequence shown below is from the reference sequence of NM_012068. The complete sequence of this clone may contain minor differences, such as SNPs.
Blue=Stop Codon Red=Cloning site

GGCAAGTTGGACGCCCGCAAGATCCGCGAGATTCTCATTAAGGCCAAGAAGGGCGGAAAGATCGCCGTG
TAACAATTGGCAGAGCTCAGAATTCAAGCGATCGCC
GCCCGGAGCCAGAGGACCCGTAGCTGCTAGAAGGGCAGGGGTGTGGCTTCTGGGGGCTGGTCTTCAGCT
CTGGCGCCTTCATCCCCCTGCCTCTACCTTCATTCCAAACCCCTCTCGGCCGGGTGCAGTGGCTTATGC
TTGTAATCCCAGCACTTTGGGAGGCCAAGGCAGGAGGATCGTTTGAGGCCAGGAGGTCAATACCAGCCT
GGGCAACATAGTAAGACCCTGTCTCTATTAAAAAAAAAAAATCAACCCTTCTTCCCCACCAAACCACCC
AACTCCTCTCTACTCTTATCCTTTTATCCTCTGTCTCTGCTTATCACCTCTCTTGCGTATTTCTGGATC
TCCTTCCCTCCTTTCTCGTCCAAATCATGAAATGTTTGGCCTTAGTCAATGTCTATGCCCGTCACATAA
CAGCCGAGGCACCGAGGCCCACAGGGAAGCAGCTGGGAGCTTGGAAACCTGGTCTCTTGAATTTCAAAC
CTGGTTTCTTACAGGTGGTTGTCTGGGGTGGGTGGAGTGGCGACAGGATAGAGCTGAAGGACTATGCAA
ATGAGGAAGTAAGTCAGGGCGGGCTTTGAGAAGGGGACCCATATCCTACAGGCAAAAAGCAGGCTAGGT
GACCTTGGGACACTACGCTAAGGGAGGGAGGCTAAAGGCGGCCAGGTTTGCAGTGCGGGAAGATGAGCA
GGCCAGTGGGAGGAGGGGCAGGGCAGGGCTGTAGTTGGTGACTGGGTGTTCATTTTAGCTCTAAGAAAA
AAAATCAGTGTTTCGTGAAGGTGTTGGAGAGGGGCTGTGTCTGGGTGAGGGATGGCGGGGTACTGATTT
TTTTGGGAGGTTATGAGCAAAAATAAAACGAAACATTTCCTCTGG
ACGCGTAAGCGGCCGCGGCATCTAGATTCGAAGAAAATGACCGACCAAGCGACGCCCAACCTGCCATCA
CGAGATTTCGATTCCACCGCCGCCTTCTATGAAAGG

Restriction Sites: SgfI-MluI

OTI Disclaimer: Our molecular clone sequence data has been matched to the sequence identifier above as a point of reference. Note that the complete sequence of this clone is largely the same as the reference sequence but may contain minor differences , e.g., single nucleotide polymorphisms (SNPs).

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Components: The cDNA clone is shipped in a 2-D bar-coded Matrix tube as 10 ug dried plasmid DNA. The package also includes 100 pmols of both the corresponding 5' and 3' vector primers in separate vials.

RefSeq: NM_012068.6

Summary: Transcription factor that either stimulates or represses gene transcription through binding of different DNA regulatory elements such as cAMP response element (CRE) (consensus: 5'-GTGACGT[AC][AG]-3'), ATF5-specific response element (ARE) (consensus: 5'-C[CT]TCT[CT]CCTT[AT]-3') but also the amino acid response element (AARE), present in many viral and cellular promoters. Critically involved, often in a cell type-dependent manner, in cell survival, proliferation, and differentiation (PubMed:10373550, PubMed:15358120, PubMed:21212266, PubMed:20654631). Its transcriptional activity is enhanced by CCND3 and slightly inhibited by CDK4 (PubMed:15358120). Important regulator of the cerebral cortex formation, functions in cerebral cortical neuroprogenitor cells to maintain proliferation and to block differentiation into neurons. Must be down-regulated in order for such cells to exit the cycle and differentiate (By similarity). Participates in the pathways by which SHH promotes cerebellar granule neuron progenitor cells proliferation (By similarity). Critical for survival of mature olfactory sensory neurons (OSN), directs expression of OSN-specific genes (By similarity). May be involved in osteogenic differentiation (PubMed:22442021). Promotes cell proliferation and survival by inducing the expression of EGR1 sinergistically with ELK1. Once acetylated by EP300, binds to ARE sequences on target genes promoters, such as BCL2 and EGR1 (PubMed:21791614). Plays an anti-apoptotic role through the transcriptional regulation of BCL2, this function seems to be cell type-dependent (By similarity). Cooperates with NR1I3/CAR in the transcriptional activation of CYP2B6 in liver (PubMed:18332083). In hepatic cells, represses CRE-dependent transcription and inhibits proliferation by blocking at G2/M phase (PubMed:22528486, PubMed:18701499). May act as a negative regulator of IL1B transduction pathway in liver (PubMed:24379400). Upon IL1B stimulus, cooperates with NLK to activate the transactivation activity of C/EBP subfamily members (PubMed:25512613). Besides its function of transcription factor, acts as a cofactor of CEBPB to activate CEBPA and promote adipocyte differentiation (PubMed:24216764). Regulates centrosome dynamics in a cell-cycle- and centriole-age-dependent manner. Forms 9-foci symmetrical ring scaffold around the mother centriole to control centrosome function and the interaction between centrioles and pericentriolar material (PubMed:26213385).[UniProtKB/Swiss-Prot Function]

Locus ID: 22809

MW: 32.1