

## **Product datasheet for SC330363**

## ATF2 (NM 001256093) Human Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** ATF2 (NM\_001256093) Human Untagged Clone

Tag: Tag Free Symbol: ATF2

Synonyms: CRE-BP1; CREB-2; CREB2; HB16; TREB7

**Vector:** pCMV6-Entry (PS100001)

Fully Sequenced ORF: >SC330363 representing NM\_001256093.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

ATGTACTGCGCCTGGATGTGGCCAGATCAGACCCCAACACCAACAGATTCTTGAAAAACTGTGAAGAA AAAAAAATGCCTCTAGATTTATCCCCTCTTGCAACACCTATCATAAGAAGCAAAATTGAGGAGCCTTCT GTTGTAGAAACAACTCACCAGGATAGTCCTTTACCTCACCCAGAGTCTACTACCAGTGATGAGAAGGAA GTACCATTGGCACAAACTGCACAGCCCACATCAGCTATTGTTCGTCCAGCATCATTACAGGTTCCCAAT GTAATCACCCAGGCACCATCCTCTAACAGGCCAATTGTCCCTGTACCAGGCCCATTTCCTCTTCTGTTA CATCTTCCTAATGGACAAACCATGCCTGTTGCTATTCCTGCATCAATTACAAGTTCTAATGTGCATGTT CCAGCTGCAGTCCCACTCGTTCGACCAGTCACCATGGTGCCTAGTGTTCCAGGAATCCCAGGTCCTTCC TCTCCCCAACCAGTACAGTCAGAAGCAAAAATGAGATTAAAAGCTGCTTTGACCCAGCAACATCCTCCA CCGCAGTCATTACAACAGCCAGCCACATCCACTACAGAAACTCCGGCTTCTCCAGCTCACACAACTCCA CAGACCCAAAGTACAAGTGGTCGTCGGAGAAGAGCAGCTAACGAAGATCCTGATGAAAAAAAGGAGAAAG TTTTTAGAGCGAAATAGAGCAGCTTCAAGATGCCGACAAAAAAGGAAAGTCTGGGTTCAGTCTTTA GAGAAGAAGCTGAAGACTTGAGTTCATTAAATGGTCAGCTGCAGAGTGAAGTCACCCTGCTGAGAAAT GAAGTGGCACAGCTGAAACAGCTTCTTCTGGCTCATAAAGATTGCCCTGTAACCGCCATGCAGAAGAAA

TCTGGCTATCATAGAAAATGA

Restriction Sites: Sgfl-Mlul

**ACCN:** NM\_001256093

**Insert Size:** 1125 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).



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The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube Components:

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:** 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.

NM 001256093.1 RefSeq:

RefSeg Size: 4128 bp RefSeq ORF: 1125 bp Locus ID: 1386 **UniProt ID:** P15336 Cytogenetics: 2q31.1

**Protein Families:** Druggable Genome, Transcription Factors

**Protein Pathways:** MAPK signaling pathway

40.8 kDa MW:

**Gene Summary:** This gene encodes a transcription factor that is a member of the leucine zipper family of DNA

binding proteins. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions This protein binds to the cAMPresponsive element (CRE), an octameric palindrome. It forms a homodimer or a heterodimer

with c-Jun and stimulates CRE-dependent transcription. This protein is also a histone acetyltransferase (HAT) that specifically acetylates histones H2B and H4 in vitro; thus it may represent a class of sequence-specific factors that activate transcription by direct effects on chromatin components. The encoded protein may also be involved in cell's DNA damage response independent of its role in transcriptional regulation. Several alternatively spliced

transcript variants have been found for this gene [provided by RefSeq, Jan 2014]

Transcript Variant: This variant (5) lacks an internal exon, and uses an alternate acceptor splice site at the 3' terminal exon compared to variant 1. This results in translation initiation from another start site, and a shorter isoform (4) with distinct N- and C- termini compared to

isoform 1.