

Product datasheet for **RC232836**

ATF2 (NM_001256091) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ATF2 (NM_001256091) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ATF2
Synonyms:	CRE-BP1; CREB-2; CREB2; HB16; TREB7
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RC232836 representing NM_001256091
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAGTGTGACAAACCTTTCTATGTACTGCGCCTGGATGTGGCCAGCGTTTTACCAACGAGGATCATT
 TGGCTGTCCATAAACATAAACATGAGATGACACTGAAATTTGGTCCAGCACGTAATGACAGTGTCATTGT
 GGCTGATCAGACCCCAACACCAACAAGATTCTTAAAAACTGTGAAGAAGTGGGTTTGTAAATGAGTTG
 GCGAGTCCATTTGAGAATGAATCAAGAAAGCTTCAGAAGATGACATTAATAAAATGCCTCTAGATTTAT
 CCCCTCTTGAACACCTATCATAAGAAGCAAAATGAGGAGCCTTCTGTTGTAGAAAACACTCACCAGGA
 TAGTCCTTACCTACCCAGAGTCTACTACCAGTGATGAGAAGGAAGTACCATTGGCACAAACTGCACAG
 CCCACATCAGCTATTGTTCTGTCAGCATCATTACAGGTTCCCAATGTGCTGCTTACAAGTTCTGACTCAA
 GTGAATTATTTCAGCAGGCAGTACCTTACCAACCTCAAGTACTGTAATCACCAGGCACCATCCTCTAA
 CAGGCCAATTGTCCTGTACCAGGCCATTTCTCTTCTGTTACATCTTCTAATGGACAAACCATGCCT
 GTTGCTATTCTGCATCAATTACAAGTTCTAATGTGCATGTTCCAGCTGCAGTCCCACTCGTTCGACCAG
 TCACCATGGTGCCTAGTGTTCAGGAATCCCAGGTCTTCTCTCCCAACCAAGTACAGTCAAGCAAA
 AATGAGATTAAGAGCTGCTTTGACCCAGCAACATCCTCCAGTTACCAATGGTGATACTGTCAAAGGTCAT
 GGTAGCGGATTGGTTAGGACTCAGTCAGAGGAATCTCGACCGCAGTCATTACAACAGCCAGCCACATCCA
 CTACAGAAACTCCGGCTTCTCCAGCTCACAACTCCACAGACCCAAAGTACAAGTGGTCGTCGGAGAAG
 AGCAGCTAACGAAGATCCTGATGAAAAAGGAGAAAGTTTTAGAGCGAAATAGAGCAGCAGCTTCAAGA
 TGCCGACAAAAAGGAAAGTCTGGGTTCACTTTAGAGAAGAAAGCTGAAGACTTGAGTTCATTAATG
 GTCAGCTGCAGAGTGAAGTCACTGAGAAATGAAGTGGCACAGCTGAAACAGCTTCTCTGGCTCA
 TAAAGATTGCCCTGTAACCGCCATGCAGAAGAAATCTGGCTATCATACTGCTGATAAAGATGATAGTTCA
 GAAGACATTTTCAGTGCCGAGTAGTCCACATACAGAAGCTATACAGCATAGTTCCGTCAGCACATCCAATG
 GAGTCAGTTCAACCTCCAAGGCAGAAGCTGTAGCCACTTCAGTCTCACCAGATGGCGGACCAGAGTAC
 AGAGCCTGCTCTTTCACAGATCGTTATGGCTCCTTCTCCAGTCACAGCCCTCAGGAAGT

ACCGGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC232836 representing NM_001256091
 Red=Cloning site Green=Tags(s)

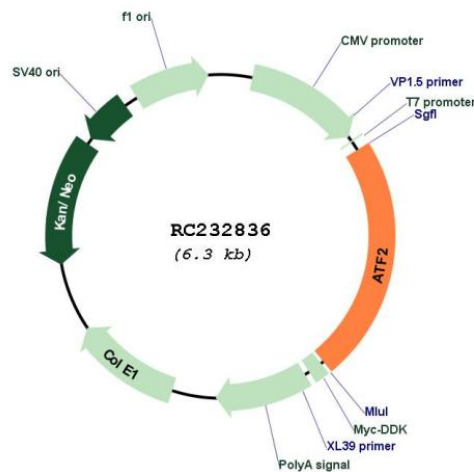
MSDDKPFLLCTAPGCGQRFNEDHLAVHKKHEMTLKFGRNDSVIVADQTPTRFLKNCEEVGLFNEL
 ASPFENEFFKASEDDIKMPLDLSPLATPIIRSKIEEPSVVEETHQDSPLPHPESTTSDEKEVPLAQTAAQ
 PTAIVRPASLQVPNVLLTSSDSSVIIQQAVPSPSTSVITQAPSSNRPIVPVPGPFLLHL PNGQTMP
 VAIPASITSSNVHVAAPVLRPVTMVPSVPGIPGPSSPQPVQSEAKMRLKAAL TQQHPPVTNGDVKGH
 GSGLVRTQSEESRPQSLQQPATSTTETPASPHTTPQTQSTSGRRRRAANEDPDEKRRKFLERNRAAASR
 CRQKRKVVWVQSLEKKAEDLSSLNGQLQSEVTLLRNEVAQLKQLLLAHKDCPV TAMQKKSQYHTADKDDSS
 EDISVSPSPHTEAIQHSSVSTSNVSVSTSKAEAVATSVL TQMADQSTEPALSQIIVMAPSSQSPSGS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Plasmid Map:

ACCN:

NM_001256091

ORF Size:

1461 bp

OTI Disclaimer:

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation:

This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	NM_001256091.1 , NP_001243020.1
RefSeq Size:	4153 bp
RefSeq ORF:	1464 bp
Locus ID:	1386
UniProt ID:	P15336
Cytogenetics:	2q31.1
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	MAPK signaling pathway
MW:	52.7 kDa
Gene Summary:	<p>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 cAMP-responsive 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]</p>