

## Product datasheet for **RG232599**

### ATF2 (NM\_001256093) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ATF2 (NM_001256093) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ATF2
Synonyms:	CRE-BP1; CREB-2; CREB2; HB16; TREB7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG232599 representing NM_001256093 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTA**CTGCGCCTGGATGTGGCCAGATCAGACCCCAACCAACAAGATTCTTGAAAACTGTGAAGAAG**  
TGGGTTTGT**TTAATGAGTTGGCGAGTCCATTTGAGAATGAATTCAGAAAGCTTCAGAAGATGACATTAA**  
AAAAATGCCTCTAGATTTATCCCTCTT**GCAACACCTATCATAAGAAGCAAAATTGAGGAGCCTTCTGTT**  
GTAGAA**CAACTACCAGGATAGTCCTTACCTACCCAGAGTCTACTACCAGTGATGAGAAGGAAGTAC**  
CATTGGCACA**AACTGCACAGCCACATCAGCTATTGTTTCGTCCAGCATCATTACAGTTC**CCAATGTGCT  
GCTTACAAGTTCTGACTCAAGTGAATTATTCAGCAGGCAGTACCTTCA**CCAACCTCAAGTACTGTAA**TC  
ACCCAGGCACCATCCTCTAACAGGCCAATTGTCCTGTACCAGGCC**ATTTCTCTTCTGTTACATCTTC**  
CTAATGGCAA**ACCATGCCTGTTGCTATTCTGCATCAATTACAAGTTCTAATGTGCATGTTCCAGCTGC**  
AGTCCC**ACTCGTTCGACCAGTCACCATGGTGCCTAGTGTTCAGGAATCCAGGTCTTCTCTCCCAA**  
CCAGTACAGTCAGAA**GCAAAATGAGATTAAGAGCTGCTTTGACCAGCAACATCCTCCAGTTACCAATG**  
GTGACTGTCAAAGT**CATGGTAGCGGATTGGTTAGGACTCAGTCAGAGGAATCTCGACCCGAGTCATT**  
ACAACAGCCAGCCACATCCACTACAGAACTCCGGCTTCTCCAGCTCACACA**ACTCCACAGACCCAAAGT**  
ACAAGTGGT**CGTCGGAGAAGAGCAGCTAACGAAGATCCTGATGAAAAAGGAGAAAGTTTTAGAGCGAA**  
ATAGAGCAGCAGCTTCAAGATGCCGACAAAAAGGAAAGTCTGGGTT**CAGTCTTTAGAGAAGAAAGCTGA**  
AGACTTGAGTT**CATTAATGGTCAGCTGCAGAGTGAAGTCAACCTGCTGAGAAATGAAGTGGCACAGCTG**  
AAACAGCTTCTTCTGGCTCATAAAGATTGCCCTGTAACCGCCATGCAGAAGAAATCTGGCTATCATAGAA  
AA

AC**CGT**ACGCGGCCGCTCGAG - GFP Tag - GTTAA



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**Protein Sequence:** >RG232599 representing NM\_001256093  
 Red=Cloning site Green=Tags(s)

MYCAWMWPDQTPTRFLKNCEEVGLFNELASPFENEFKKASEDDIKKMPLDLSPLATPIIRSKIEEPSV  
 VETTHQDSPLPHPESTTSDEKEVPLAQT AQPTS AIVRPASLQVNVLLTSSDSSV IQQAVPSPTSSTVI  
 TQAPSSNRPIVPVPGFPLLLHLPNGQTMPVAIPASITSSNVHVAAPLVRPVTMVPSVPGIPGSSPQ  
 PVQSEAKMRLKAALTQQHPPVTNGD TVKGGHGLVRTQSEESRPQSLQQPATSTTETPASP AHTTPQTQS  
 TSGRRRAANEDPDEKRKFLERNRAAASRCRQKRKVWVQSLEKKAEDLSSLNGQLQSEVTLRNEVAQL  
 KQLLLAHKDCPVTAMQKKS GYHRK

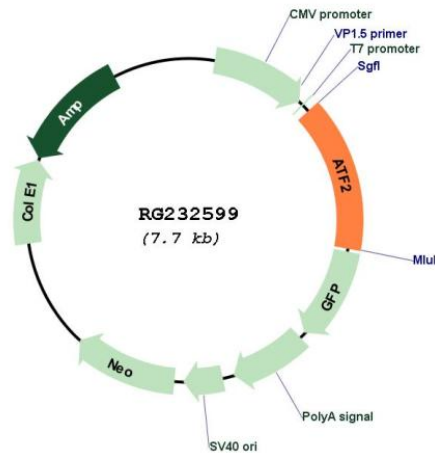
TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001256093

<b>ORF Size:</b>	1122 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001256093.2</a>
<b>RefSeq Size:</b>	4128 bp
<b>RefSeq ORF:</b>	1125 bp
<b>Locus ID:</b>	1386
<b>UniProt ID:</b>	<a href="#">P15336</a>
<b>Cytogenetics:</b>	2q31.1
<b>Protein Families:</b>	Druggable Genome, Transcription Factors
<b>Protein Pathways:</b>	MAPK signaling pathway
<b>Gene Summary:</b>	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]