

Product datasheet for **RG209917**

ATF6 beta (ATF6B) (NM_004381) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | ATF6 beta (ATF6B) (NM_004381) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | ATF6 beta |
| Synonyms: | CREB-RP; CREBL1; G13 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



[View online »](#)

ORF Nucleotide Sequence:

>RG209917 representing NM_004381
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGCGGAGCTGATGCTGCTCAGCGAGATTGCTGACCCGACGCGTTTCTCACCGACAACCTGCTTAGCC
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 TGATTCACATCAAGACCTCCACAGTCCCCCTCGCTCCGAAAACAGCCATCCCCAACCCAGGCAATGC
 CACAGTGGCCCTTGCCAGTCTCTGCAGCCAGCCAGGCCACCAGGCCCTCCACCAGCCCTCTACCTC
 AATCATCCC

AG**CGGACCG**ACGCGTACGCGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG209917 representing NM_004381
Red=Cloning site Green=Tags(s)

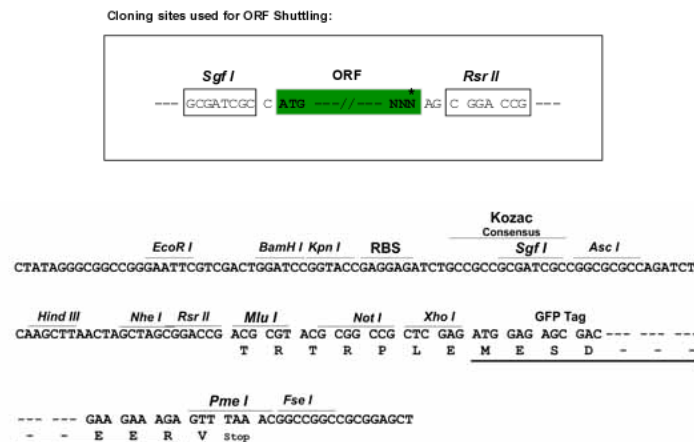
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VVLIQGAIRVQPEGPAPSLRPRERKSIVPAMPNGNSCPPEVDAKLLKRQQRMIKNRESACQSRKKKEYL
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SAPISPRMNGEPQPRRHLLGFSEQEPVQGV EPLQGSSQGPKPEQPSP TDQPSFNLTAFFGGAKELLLR
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SGRGAPGDYEEMMQIECEVMDTRV IHIKTSTVPPSLRKQPSPTPGNATGGPLPVSAASQAHQASHQPLYL
NHP
    
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SGPTRRRLE - GFP Tag - V

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_004381

ORF Size: 2109 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:

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_004381.5](#)

RefSeq Size: 2622 bp

RefSeq ORF: 2112 bp

Locus ID: 1388

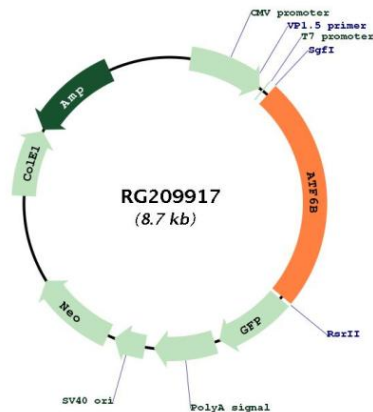
UniProt ID: [Q99941](#)

Cytogenetics: 6p21.32

Protein Families: Transcription Factors

Gene Summary: The protein encoded by this gene is a transcription factor in the unfolded protein response (UPR) pathway during ER stress. Either as a homodimer or as a heterodimer with ATF6-alpha, the encoded protein binds to the ER stress response element, interacting with nuclear transcription factor Y to activate UPR target genes. The protein is normally found in the membrane of the endoplasmic reticulum; however, under ER stress, the N-terminal cytoplasmic domain is cleaved from the rest of the protein and translocates to the nucleus. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2008]

Product images:



Circular map for RG209917