

Product datasheet for **RG227970**

ATF6 beta (ATF6B) (NM_001136153) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ATF6 beta (ATF6B) (NM_001136153) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ATF6B
Synonyms:	CREB-RP; CREBL1; G13
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG227970 representing NM_001136153
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGGAGCTGATGCTGCTCAGCGAGATTGCTGACCCGACGCGTTTCTCACCGACAACCTGCTTAGCC
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 CCCCTTGCAGTCTCTGCAGCCAGCCAGGCCACCAGGCTCCCACCAGCCCTTACCTCAATCATCCC

AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG227970 representing NM_001136153
 Red=Cloning site Green=Tags(s)

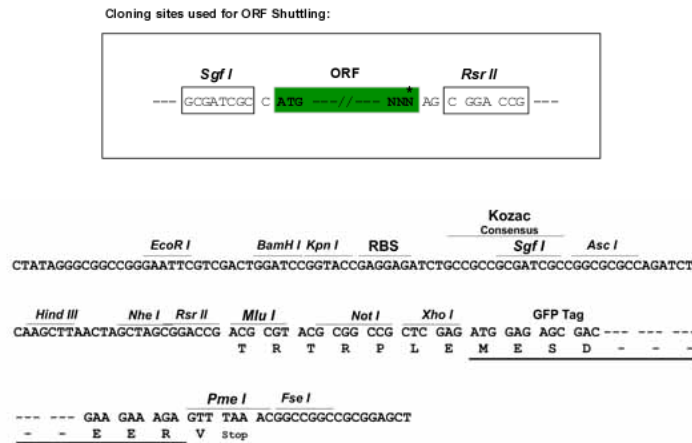
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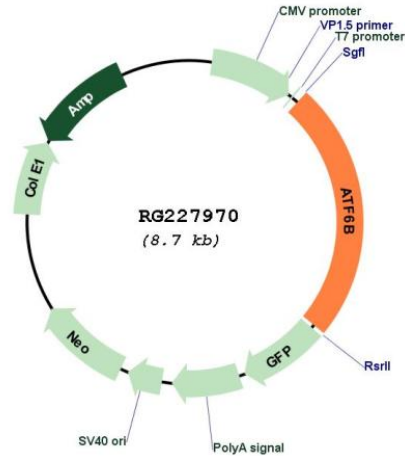
SGPTRRRLE - GFP Tag - V

Restriction Sites:

SgfI-RsrII

Cloning Scheme:



Plasmid Map:


ACCN: NM_001136153

ORF Size: 2100 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_001136153.2](#)

RefSeq Size: 2613 bp

RefSeq ORF: 2103 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]