

Product datasheet for **RR204267**

Atf6 (NM_001107196) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Atf6 (NM_001107196) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Atf6
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide Sequence:

>RR204267 representing NM_001107196
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGTCGCCTTTTAGTCCGGTCTTCTCATGGACCAGGTGAAGACTGGGAGTCCACGTTGTTTGCTG
 AGCTTGGCTATTTACAGACACGGATGATGTCAGTTTGTATGCAGCACATGAGACTTACGAAAATAATTT
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 GGTCCACAGACTCCTGTTCTTCAACTCAGCACGTTCTGAGGAGTTGGACTTGTGTCTAGTTCTCAGTC
 TCCCTTTCTTGTATGGCGACAGCTGTACAGCCCTCCTCAGCAGAGCCACTGAAGGAAGAGAAGCCT
 GTCAGTGGTCTGGAAACAAAACGGAACATGGACTGACTCCAAAGAAAAAATCCAGATGAGTTCAAAC
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 CAGCCTGCGCCACCAAAGGTCAGACTGTTTTGCTCTCTCAGCCTGCTGTGGTTCAACTCAGACCCCTG
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 GAATGTGGTGCCAGCCCCGGTGGTGAACAGCCCGTGAACGGAAGTGTGTGACTAAACCTGTTCTA
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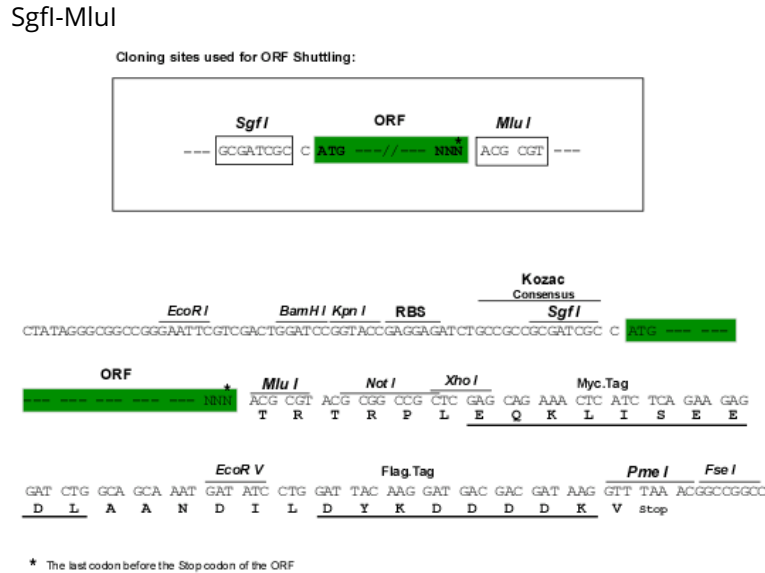
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Protein Sequence: >RR204267 representing NM_001107196
 Red=Cloning site Green=Tags(s)

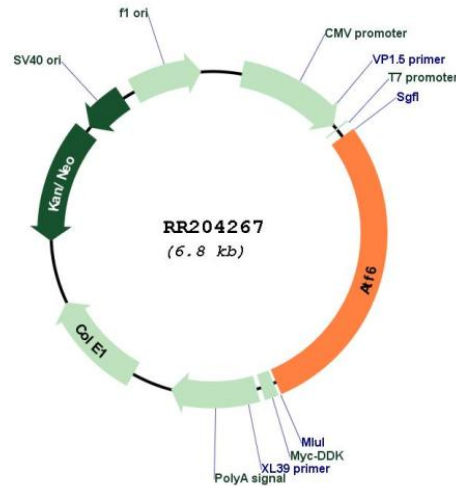
MESPFSPVLPHPGGEWESTLFAELGYFTD TDDVQF DAAHETYENNF D HLNFDL D LMPWESDIWSPSSH
 CSDIKAEPQPLSPASSSCSVSSPRSTDSCSSTQHVP EELDLLSSQSPLSLYGDSC HSPSSAEPLKEEK
 VTGPGNKTEHGLTPKKKI QMSSKPSVQPKPLLLPAAPKTPANASVPAKTI I I Q T L P A L M P L A K Q Q S I I S I
 QPAPT KGQTVLLSQPAVVQLQTPGVLP SAQPVLAVTGGATQLPNHVVNVVPAPVVNSPVNGKLCVTKPVL
 QSSTRSTGSDIAVLRQQRMIKNRESACQSRKKKKEYMLGLEARLKAALSENEQLKKENGSLKRQLDQVV
 SENQRLKVPSPKRRAVCVMIVLAFIMLNYGPM SLEQDSRRVKPSVSPANQRHLL EFSAKEVKDTSDGD
 NQKNSYRDHSVNDKALMVLSEEP LLYIPPPCQPLINTTESLRLNHEL RGVVHRHEVERTKSRRTNS
 QQKTRILQGALEQGSNSQLMAVQYTETTSI SRNSGSELQVYYASPGSYQGFDAIRRRGDTFVYVFRRD
 HLLL PATTHNKTRPKMSIVLPAININDNVINGQDYEVMMQIDCQVMDTRILHIKSSSVPPYL RDHQRNQ
 TSTFFGSPPTATETTHVSTLPESVQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:
Cloning Scheme:



Plasmid Map:



ACCN: NM_001107196

ORF Size: 1968 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_001107196.1](#), [NP_001100666.1](#)

RefSeq Size: 3217 bp

RefSeq ORF: 1971 bp

Locus ID: 304962

UniProt ID: [G3V909](#)

Cytogenetics: 13q24

MW: 72.7 kDa

Gene Summary: Transmembrane glycoprotein of the endoplasmic reticulum that functions as a transcription activator and initiates the unfolded protein response (UPR) during endoplasmic reticulum stress. Cleaved upon ER stress, the N-terminal processed cyclic AMP-dependent transcription factor ATF-6 alpha translocates to the nucleus where it activates transcription of genes involved in the UPR. Binds DNA on the 5'-CCAC[GA]-3'half of the ER stress response element (ERSE) (5'-CCAAT-N(9)-CCAC[GA]-3') and of ERSE II (5'-ATTGG-N-CCACG-3'). Binding to ERSE requires binding of NF-Y to ERSE. Could also be involved in activation of transcription by the serum response factor. May play a role in foveal development and cone function in the retina (By similarity).[UniProtKB/Swiss-Prot Function]