

## Product datasheet for **MR221667**

### **Atf6 (NM\_001081304) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Atf6 (NM_001081304) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Atf6
Synonyms:	9130025P16Rik; 9630036G24; AA789574; Atf6alpha; ESTM49
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide  
Sequence:**

>MR221667 representing NM\_001081304  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAGTCGCCTTTAGTCCGGTCTTCTCATGGACCAGATGAAGACTGGGAGTCTACGTTGTTTGCTG  
 AACTTGGCTATTTACAGACACTGATGATGTGCACTTTGATGCAGCACATGAGGCTTATGAAAATAATTT  
 TGATCATCTTAATTTTGATTTGGATTTGATGCCTTGGGAGTCAGACCTATGGAGCCCCGGCAGCCACTTC  
 TGCTCAGACATGAAGGCAGAGCCCCAGCCTCTTTCTCCGGCTTCTCCAGTTGCTCCATCTCCTCTCCTC  
 GGTCCACAGACTCGTGTCTTCAACTCAGCACGTTCTGAGGAGTTGGATTTGTTGTCTAGTTCTCAGTC  
 CCCCCTTTCTTATATGGCGACAGCTGTAATAGCCCTCTCTGTAGAGCCACTGAAGGAAGAGAAGCCT  
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 CAGCCTGCGCCCAAAAGGCCAGACTGTTTTGCTCTCTCAGCCGACCGTGGTCCAGCTTCAGAGCCCTG  
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 CAAAGTGCCACCAGAAGTATGGGTTCCGATATCGCTGTGCTGAGGAGACAGCAGCGGATGATAAAGAACC  
 GAGAGTCTGTTGTCAGTCGCGCAAGAAGAAGAAAGAGTATATGCTAGGACTGGAGGCCAGGCTCAAGGC  
 TGCCCTCTCAGAGAAATGAGCAGCTGAAGAAGGAGAATGGCTCCCTGAAGCGACAGCTGGACGAGGTTGGT  
 TCAGAGAAACCAGAGGCTCAAAGTCCAAGTCCAAGCGAAGAGCTGTCTGTGTGATAGTATTAGCAT  
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 CCATGAACTTCGAGGCTGGGTTCCATAGACATGAAGTGAAAGGACCAAATCTAGAAGAAATGACAAATAGC  
 CAACAGAAAGCCCGATTCTCCAGGGTCTCTGGAACAGGGCTCTAATTCTCAGCTGATGGCTGTCCAGT  
 ACACAGAAACCACTAGCATCAGTAGGAATTCTGGGAGTGAGCTGCAAGTGTATTACGCCTCCCCTGGAAG  
 TTACCAAGGCTTCTTTGACGCCATCCGCAGGAGGGGAGATACGTTTTACGTGGTCTCATTTCGAAGGGAT  
 CATCTGCTATTACCAGCTACCACCCACAACAAGACCACAAGACCAAAAAATGTCAATTGTATTACCAGCAA  
 TAAACATAAAATGATAATGTGATCAATGGCAGGACTATGAAGTGATGATGCAGATTGACTGTCAGGTGAT  
 GGACACCAGGATCCTCCACATCAAAGCTCCTCAGTCCCCCTTATCTCCGGGATCATCAGCGGAACCAA  
 ACCAGCACCTTCTTTGGTTCCTCCCAACAACCACAGAGACGACCATGTGGTCAGCACCATCCCTGAGT  
 CGTTGCAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR221667 representing NM\_001081304  
 Red=Cloning site Green=Tags(s)

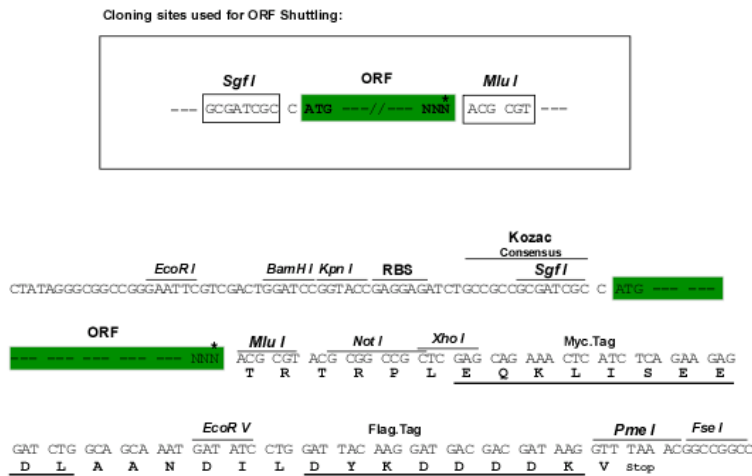
MESPFSPVLPHPGDEWESTLFAELGYFTDTHVDFDAAHEAYENNFHDLNFDLDMPWESDLWSPGSHF  
 CSDMKAEPQPLSPASSSCSISSPRSTDSCSSTQHVPEELDLLSSQSPLSLYGDSCNSPSSVEPLKEEK  
 ITGPGNKTEHGLTPKKKIQMSSKPSVQPKPLLLPAAPKTQTNASVPAKAI IQTLPALMPLAKQQSIISI  
 QPAPTKGQTVLLSQPTVVQLQSPA VLP SAQPVLAVTGGAQLPNHVNVNLPAPVVSSPVNGKLSVTKPVL  
 QSATRSMGSDIAVLRQQRMIKNRESACQSRKKKKEYMLGLEARLKAALSENEQLKKENGLKRQLEVV  
 SENQRLKVPSPKRRAVCVMI VLA FIMLN YGPM SML EQESRRVKPSVSPANQRHLLFE SAK EVKDTSDGD  
 NQKDSYSYDHSVNDKALMVLSEEP LLYMP P P P C Q P L I N T T E S L R L N H E L R G W V H R H E V E R T K S R R M T N S  
 QQKARILQGALEQGSNSQLMAVQYTETTSISRNSGSELQVYYASPGSYQGFFDAIRRRGDTFVYVSRFRD  
 HLLL PAT H N K T T R P K M S I V L P A I N I N D N V I N G Q D Y E V M M Q I D C Q V M D T R I L H I K S S S V P P Y L R D H Q R N Q  
 T S T F F G S P P T T T E T T H V S T I P E S L Q

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



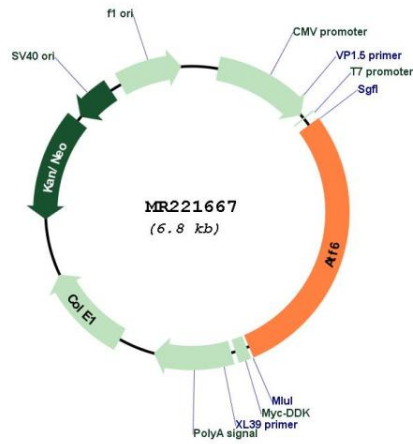
\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001081304

**ORF Size:** 1968 bp

<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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></p>
<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 Size:</b>	7463 bp
<b>RefSeq ORF:</b>	1971 bp
<b>Locus ID:</b>	226641
<b>UniProt ID:</b>	<a href="#">F6VAN0</a>
<b>Cytogenetics:</b>	1 76.96 cM
<b>MW:</b>	73.1 kDa
<b>Gene Summary:</b>	<p>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]</p>

Product images:



Circular map for MR221667