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Product datasheet for MR210108

Atg7 (NM_028835) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Atg7 (NM_028835) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Atg7
Synonyms:	1810013K23Rik; Agp7; Apg7l; Atg7l; Gm21553
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>MR210108 representing NM_028835
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGGGACCCTGGACTGGCCAAGTTGCAGTTCGCCCCCTTTAATAGTGCCCTGGACGTTGGCTTCTGGC
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CTACAATGGTGACTCTGCTGGTCTGCCCACCCGCTTGACGTTGGAGTTCAGTGCTTTTGACATGAGTGCC
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CAGCAGACAAGAAGCTCCTTCTGGAGCAGTCAGCAAATGAGATCTGGGAAGCCATAAAGTCAGGTGCTGC
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CCCAGTACCCTGGATGGCCTTTGAGGAATTTTTTGGTCCTGGCAGCCCACAGATGGAGCGGCAGTTTCCA
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GAGAAGGATTCACCTTCCTAGCGAAGGTTTTTAACTCCTCACATTCCTTCTTAGAAGACTTGACCGGTCT
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ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR210108 representing NM_028835
Red=Cloning site Green=Tags(s)

MGDPGLAKLQFAPFNSALDVGFWHELTQKKLNEYRLDEAPKDIKGYYYNGDSAGLPTRLTLEFSAFDMSA
STPAHCCPAMGTLHNTNTLEAFKTADKKLLLEQSANEIWEAIKSGAALENPMLLNKFLLLTFADLKKYHF
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HYSDFFQGQRTKITVGVYDPCNLAQYPGWPLRNFLVLAAHRWSGSFQSVEVLCFRDRTMQGARDVTHSII
FEVKLPEMAFSPDCPKAVGWEKNQKGGMGPRMVNLSGCMDPKRLAESSVDLNLKLMCWRLVPTLDLDKVV
SVKCLLLGAGTLGCNVARTLMGWGVRHVTFVDNAKISYSNPVRQPLYEFEDCLGGGKPKALAAAERLQKI
FPGVNARGFNMSIPMPGHPVNFSDVTMEQARRDVEQLEQLIDNHDVIFLLMDTRESRWLPTVIAASKRKL
VINAALGFDTFVVMRHGLKKPKQQGAGDLCPSHLVAPADLGSSLFANIPGYKLGCYFCNDVVAPGDSTRD
RTLDQQCTVSRPGLAVIAGALAVELMVSVLQHPEGGYAIASSSDDRMNEPPTSLGLVPHQIRGFLSRFDN
VLPVSLAFDKCTACSPKVLDQYEREGFTFLAKVFNSSHSFLEDLTGLTLLHQETQAAEIWDMSDEETV

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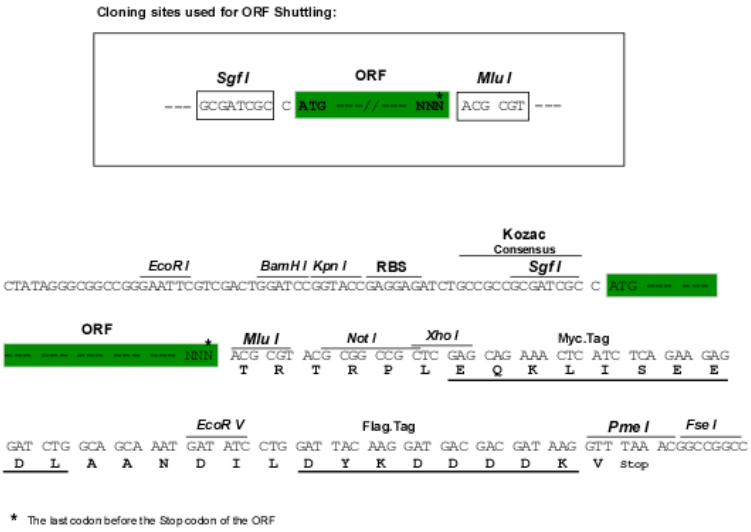
Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_028835

ORF Size: 2094 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: NM_028835.5

RefSeq Size: 3061 bp

RefSeq ORF: 2097 bp

Locus ID: 74244

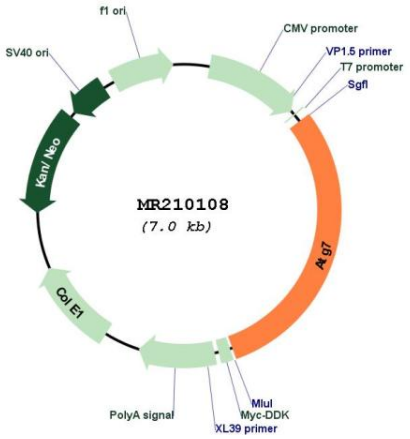
UniProt ID: Q9D906

Cytogenetics: 6 E3

MW: 78 kDa

Gene Summary: This gene encodes an E1-like activating enzyme that is essential for autophagy and cytoplasmic to vacuole transport. The encoded protein is also thought to modulate p53-dependent cell cycle pathways during prolonged metabolic stress. It has been associated with multiple functions, including axon membrane trafficking, axonal homeostasis, mitophagy, adipose differentiation, and hematopoietic stem cell maintenance. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2015]

Product images:



Circular map for MR210108