

Product datasheet for **MC228712**

Atg7 (NM_001253718) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Atg7 (NM_001253718) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Atg7
Synonyms:	1810013K23Rik; Agp7; Apg7l; Atg7l; Gm21553
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >MC228712 representing NM_001253718
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGGGGACCCTGGACTGGCCAAGTTGCAGTTCGCCCCCTTTAATAGTGCCTGGACGTTGGCTTCTGGC
 ACGAACTGACCCAGAAGAAGTTGAACGAGTACCGCCTGGACGAGGCACCCAAAGACATCAAGGGCTATTA
 CTAACAATGGTGACTCTGTGGTCTGCCACCCGCTTGACGTTGGAGTTAGTGCTTTTGACATGAGTGCC
 TCCACGCCTGCCACTGTGCCCGGCCATGGGAACCTGCACAACACCAACACACTTGAGGCTTTTAAGA
 CAGCAGACAAGAAGCTCCTTCTGGAGCAGTCAGCAAATGAGATCTGGGAAGCCATAAAGTCAGGTGCTGC
 TCTCGAAAACCCATGCTCCTCAACAAGTTTCTGCTCCTGACCTTCGCGGACCTAAAGAAGTACCACTTC
 TACTACTGGTTTTGCTGCCCGCCCTCTGTCTTCTGAGAGCATCCCTCTAATCCGGGGACCTGTGAGCT
 TGGATCAAAGGCTTTCACCAAAACAGATCCAGGCCCTGGAGCATGCCTATGATGATCTGTGTCGAGCCGA
 AGGCGTCACGGCCCTGCCCTACTTCTTATTCAAGTACGATGACGACACTGTTCTGGTCTCCTTGCTCAA
 CACTACAGTGATTTCTTCCAAGTCAAAGGACAAAGATAACAGTTGGTGTGTACGATCCCTGTAACCTAG
 CCCAGTACCCTGGATGGCCTTTGAGGAATTTTTGGTCTGCGAGCCACAGATGGAGCGGCAGTTTCCA
 GTCCGTTGAAGTCCTCTGCTTTCGGGACCCACCATGCAGGGAGCTAGAGACGTGACACATAGCATCATC
 TTTGAAGTGAAACTTCCAGAAAATGGCATTTAGCCAGATTGTCCTAAAGCTGTTGGCTGGGAGAAGAACC
 AGAAAGGAGGCATGGGTCCGAGGATGGTGAACCTCAGTGGATGTATGGACCCAAAGGCTGGCTGAGTC
 ATCTGTGGATCTGAATCTCAAGCTGATGTGCTGGCGATTGGTCCCACCTGGACTTGGACAAGGTCGTG
 TCTGTCAAGTGCCTGCTGCTGGGAGCTGGTACCTTGGGGTGTAAATGTGGCTAGGACACTGATGGGCTGGG
 GCGTCAGACATGTCACCTTTGTGGATAACGCCAAGATCTCCTACTCCAATCCCCTGAGGCAGCCTCTGTA
 TGAATTTGAAGATTGTCTAGGGGGTGGCAAGCCCAAGGCCCTGGCTGCAGCAGAGCGGCTACAGAAAATA
 TTTCCCGGAGTGAATGCCAGAGGGTTCAACATGAGCATCCCCATGCCAGGACACCCTGTGAACCTCTCTG
 ACGTCACGATGGAGCAGGCCCGCAGAGATGTGGAGCAGCTGGAGCAGCTCATTGATAACCATGATGTCAT
 CTTCTGCTAATGGACACCAGGGAGAGCCGGTGGCTTCTACTGTTATTGCAGCCAGCAAGCGAAAGCTG
 GTCATCAACGCTGCCTTGGGGTTTGATACCTTTGTTGTCATGAGACATGGCCTGAAGAAACCAAGCAGC
 AGGGAGCCGGAGACCTCTGCCAAGCCATCTGTAGCACCTGCTGACCTGGGCTCCTCACTTTTTGCCAA
 CATCCCTGGATACAAGCTTGGCTGCTACTTCTGCAATGATGTGGTGGCTCCAGGAGATCAACCAGAGAC
 CGGACTCTGGACCAGCAGTGCACAGTGAAGCCAGGCCAGGCTGGCCGTGATTGCAGGTGCCCTGGCTGTGG
 AGCTGATGGTCTCTGCTGTCAGCATCCTGAGGGGGGCTACGCCATCGCCAGCAGCAGTGTGACCGCAT
 GAATGAGCCTCCACCTCGCTGGGACTTGTGCCTCACCAGATCCGGGGTTTTCTGTACAGGTTCCGATAAT
 GTTCTTCTGTCAGCCTGGCATTGATAAATGTACAGCCTGTTACCCAAAGTCTTGTATCAGTACGAGC
 GAGAAGGATTCACCTTCTAGCGAAGGTTTTAACTCCTCACATTCCTTCTAGAAGACTTGACCGGTCT
 TACCCTGCTCCATCAAGAGACCCAAGCTGCTGAGATCTGGGACATGAGTGACGAGGAGACTGTCTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_001253718

Insert Size: 2097 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.

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:	<ol style="list-style-type: none">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:	<u>NM_001253718.1</u> , <u>NP_001240647.1</u>
RefSeq Size:	3895 bp
RefSeq ORF:	2097 bp
Locus ID:	74244
UniProt ID:	<u>Q9D906</u>
Cytogenetics:	6 E3
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (2) differs in the 5' UTR and lacks an alternate exon in the 5' coding region, resulting in initiation of translation from a downstream start codon, compared to variant 1. Variants 2 and 3 encode the same isoform (2), which has a shorter N-terminus, compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>