

Product datasheet for **MC208093**

Atg4a (NM_174875) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Atg4a (NM_174875) Mouse Untagged Clone
Tag: Tag Free
Symbol: Atg4a
Synonyms: Al627006; Apg4a; Atg4al; Autl2; AV169859
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC208093 representing NM_174875
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGAGTCAGTTATGTCCAAGTATGAAAACCAGATTCTTATTTCCCTGACTACCTGGAAGAATCCCGG
 ATACAGATGAGCTGGTATGGATTCTGGGAAGCAGCACCCCTTAAGACAGAAAAATCTAAGCTGTTGTC
 TGATATAAGTGCTCGTCTATGGTTTACATACAGAAGGAAGTTTTCCCGATTGGGGGAACAGGCCCTTCA
 TCTGATGCTGGATGGGGATGTATGCTGCGCTGTGGGCAGATGATGCTGGCTCAAGCCCTCATCTGCAGAC
 ACTTGGGAAGGGATTGGAAGTGGGAGAGACAAAAAGAACAACCCAAAGAATACAAAGGATACTGCAGTG
 TTTCTAGATAGAAAAGACTGTTGCTATTCAATCCATCAGATGGCACAAATGGGTGTAGGAGAAGGGAAA
 TCAATTGGCGAATGGTTTGGACCAACACAGTTGCACAGGTGATAAAAAACTCGCTTTATTTGATGAAT
 GGAATTCCTTGGCTGTTTATGTTTCCATGGATAACACAGTGGTCATTGAAGATATCAAGAAAAATGTGCTG
 GTTCTTCCCTGTGGGTGCTGCTGACCCAGCTGGTGATTTTCTGACTGCATCCAATCAGAGTAGAGACACC
 TCTGTCCCGTGCTCAGCCTGAAACCCCTGCTGCTCATTGTGCCCTTCGCCTGGGCATAAACCAAAATCA
 ATCCTGTGTATGTTGAAGCATTCAAAGAGTGTTTTAAGATGCCACAGTCTTTAGGGGCTTTAGGAGGAAA
 GCCAAATAACGCCTATTATTTTCATAGGATTCTTAGGAGATGAGCTCATTTTTTTGGACCCCTCACACAACC
 CAGACTTTTGTGACATTGAAGAGAGTGGACTAGTAGACGACCAGACTTTTTCATTGCCTGCAGTCTCCAC
 AGCGGATGAGTATCCTGAACTTGGATCCTTCTGTGGCCTTGGGATTTTTCTGCAAAGAAGAGAAAGACTT
 TGATAATTGGTGTAGCCTTGTTCAGAAGGAAATCTAAAGGAGAAATTTGAGGATGTTTGAATTGGTTCAG
 AAGCACCCATCACACTGGCCTCCCTTTGTACCTCCAGCCAAGCCAGAAGTGACAACCACAGGGGCAGAAT
 TCATAGAGTCGACTGAACAACCTGGAGGACTTTGAGCTGGAGGAAGATTTTGAATTCGAGTGTAGGCTA
 G

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA



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Restriction Sites:	Sgfl-Mlul
ACCN:	NM_174875
Insert Size:	1191 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).
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_174875.3</u> , <u>NP_777364.3</u>
RefSeq Size:	2192 bp
RefSeq ORF:	1191 bp
Locus ID:	666468
UniProt ID:	<u>Q8C9S8</u>
Cytogenetics:	X F1
Gene Summary:	Cysteine protease required for the cytoplasm to vacuole transport (Cvt) and autophagy. Cleaves the C-terminal amino acid of ATG8 family proteins to reveal a C-terminal glycine. Exposure of the glycine at the C-terminus is essential for ATG8 proteins conjugation to phosphatidylethanolamine (PE) and insertion to membranes, which is necessary for autophagy. Preferred substrate is GABARAPL2 followed by MAP1LC3A and GABARAP. Has also an activity of delipidating enzyme for the PE-conjugated forms (By similarity). [UniProtKB/Swiss-Prot Function]