

Product datasheet for MR206129

Atg4b (NM_174874) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Atg4b (NM_174874) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Atg4b
Synonyms: 2510009N07Rik; Apg4b; Atg4bl; Autl1; AW048066
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR206129 representing NM_174874
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGATCGCC

ATGGACGCAGCCACTTTGACATATGATACTCTCCGTTTCTGTAATTTGAAGATTTCCCTGAGACCTCAG
 AGCCTGTTGGATTCTGGGCAGAAAATACAGCATTTTACAGAGAAGGACGAAATCTGTCTGATGTTGC
 ATCCAGACTTTGGTTTACATACAGGAGAACTTCCAGCTATTGGGGAACTGGCCCTACTTCAGACACA
 GGCTGGGGTTGCATGCTTCGGTGTGGACAGATGATCTTTGCCAGGCCCTGGTATGCCGGCACTTAGGTC
 GAGATTGGAGGTGGACTCAGCGAAGAGGCAGCCTGACAGCTACTTTAATGTCCTCAATGCTTTCCTCGA
 CAGGAAGGACAGCTACTATTCCATCCATCAGATAGCGCAAATGGGAGTTGGCGAAGGCAAGTCTATAGGC
 CAGTGGTACGGGCCGAACACTGTTGCCAGTCCCAAGAACTTGTGTATTGACACATGGAGTTCCT
 TGGCTGTTACATAGCAATGGACAACACTGTGGTGTGGAGGAAATCAGAAGTTATGCAGGGCCAACT
 TCCCTGTGCTGGGGCGGCTGCACCTCCTACTGATTGAGAGGCACTGTAATGGGTTCCCTGCTGGAGCT
 GAAGTCACCAACAGGCCATCGGCTTGGAGACCACTAGTGCTTCTCATCCCTCCTCCGCTGGGACTGACAG
 ACATCAATGAGGCCTATGTGGAGACGCTGAAGCACTGTTTCATGATGCCCCAGTCCCTGGGTGTTATTGG
 AGGGAAGCCCAACAGTGGCCACTACTTTATTGGCTATGTTGGGGAGGAGCTCATCTATCTGGACCCCA
 ACTACACAGCCTGCAGTGGAGCTGACTGACAGCTGCTTCATCCCGACGAGAGCTCCACTGCCAGCACC
 CTCCTCTAGGATGGGCATTGGAGAGCTTGACCGTCCATTGCTGTGGGGTTTTCTGTAAGAAGGAGGA
 AGACTTTAACGACTGGTGTGAGCAAGTCAAAAAGCTATCCAGCTTGGAGGTGCCCTGCCATGTTTGAG
 CTGGTGAACAGCAGCCTTCCATCTGGCTGCCAGGATGCTGAACTGTCCCTAGACTCTTCTGATG
 TAGAGAGACTGGAGAGGTTTTTACTCTGAGGATGAAGACTTTGAAATCTTATCCCTC

ACGCGTACGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR206129 representing NM_174874
Red=Cloning site Green=Tags(s)

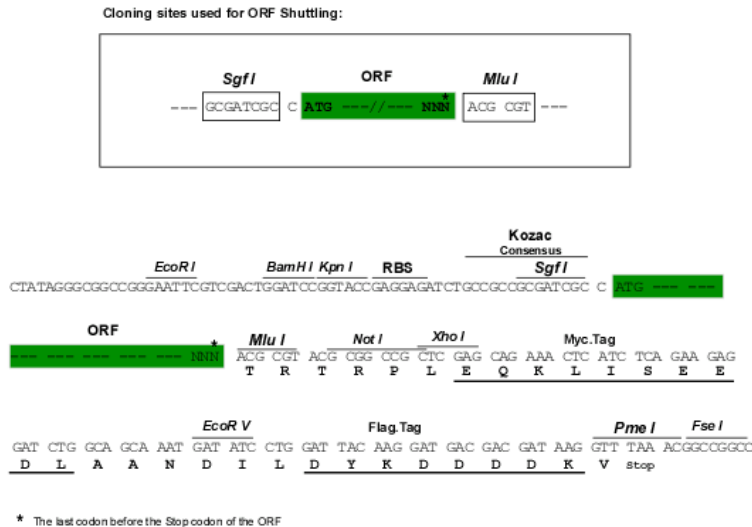
MDAATLYDTLRFAEFEDFPETSEPVWILGRKYSIFTEKDEILSDVASRLWFTYRRNFP AIGGTGPTS DT
 GWGMLRCGQMIFAQALVCRHLGRDWRWTQRKRQPD SYFNVLNAFLDRKDSYYSIHQIAQMVGEGK SIG
 QWYGPNTVAQVLKLA VFDTWSSLAVHIAMDNTVVMEEIRRLCRANLPCAGAAALPTDSERHCNGFPAGA
 EVTNRPSAWRPLVLLIPLRLGLTDINEAYVETLKHCFMMPQSLGVIGGKPN SAHYFIGYVGEELIYLDPH
 TTQPAVELTDSCFIPDESFHCQHPPSRMGIGELDPSIAVGGFFCKEEDFNDWCQVKKLSQLGGALPMFE
 LVEQQPSHLACQDVLNLSLDSSDVERLERFFDSEDEDFEILSL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_174874

ORF Size: 1179 bp

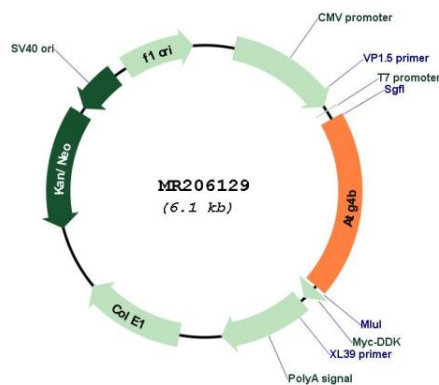
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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:	<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:	NM_174874.1 , NM_174874.2 , NM_174874.3 , NP_777363.1
RefSeq Size:	2965 bp
RefSeq ORF:	1182 bp
Locus ID:	66615
UniProt ID:	Q8BGE6
Cytogenetics:	1 D
MW:	44.9 kDa
Gene Summary:	Cysteine protease required for the cytoplasm to vacuole transport (Cvt) and autophagy. Cleaves the C-terminal amino acid of ATG8 family proteins MAP1LC3, GABARAPL1, GABARAPL2 and GABARAP, 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. Has also an activity of delipidating enzyme for the PE-conjugated forms (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR206129