

## Product datasheet for SC309635

### ATG4B (NM\_178326) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ATG4B (NM_178326) Human Untagged Clone
Tag:	Tag Free
Symbol:	ATG4B
Synonyms:	APG4B; AUTL1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC309635 representing NM_178326. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTT TAGTGAACCGTCAGAATTTTGT AATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCC GCGATCGCC
ATGGACGCAGCTACTCTGACCTACGACACTCTCCGGTTTGCTGAGTTTGAAGATTTCTGAGACCTCA
GAGCCCGTTTGGATACTGGGTAGAAAATACAGCATTTTTCAGAAAAGGACGAGATCTTGCTGATGTG
GCATCTAGACTTTGGTTTACATACAGGAAAACTTCCAGCCATTGGGGGGACAGGCCCCACCTCGGAC
ACAGGCTGGGGCTGCATGCTGCCGTGTGGACAGATGATCTTTGCCAAGCCCTGGTGTGCCGGCACCTA
GGCCGAGATTGGAGGTGGACACAAGGAAGAGGCCAGCCAGACAGCTACTTCAGCGTCCTCAACGCATTC
ATCGACAGGAAGGACAGTTACTACTCCATTACCAGATAGCGCAATGGGAGTTGGCGAAGCAAGTCC
ATAGGCCAGTGGTACGGGCCAACACTGTCGCCAGGTCCTGAAGAAGCTTGCTGTCTTCGATACGTGG
AGCTCCTTGCCGGTCCACATTGCAATGGACAACACTGTTGTGATGGAGGAAATCAGAAGTTGTGCAGG
ACCAGCGTTCCCTGTGCAGGCGCCACTGCGTTTCTGCAGATTCCGACCGGCACTGCAACGGATTCCCT
GCCGGAGCTGAGGTACCAACAGGCCGTCGCCATGGAGACCCCTGGTACTTCTCATTCCCCTGCGCCTG
GGGCTCACGGACATCAACGAGGCTACGTGGAGACGCTGAAGCACTGCTTCATGATGCCCGAGTCCCTG
GGCGTCATCGGAGGGAAGCCCAACAGCGCCCACTACTTCATCGGCTACGTTGGTGGAGAGCTCATCTAC
CTGGACCCCAACACCACGAGCCAGCCGTCGGAGCCCACTGATGGCTGCTTCATCCCGACGAGAGCTTC
CACTGCCAGCACCCCGCTGCCGATGAGCATCGCGGAGCTTGACCCGTCATCCGCTGTGGGGTTTTTC
TGTAAGACTGAAGATGACTTCAATGATTGGTGCCAGCAAGTCAAAAAGCTGTCTCTGCTTGAGGTGCC
CTGCCATGTTTGGAGCTGGTGGAGCTGCAGCCTTCACATCTGGCCTGCCCGACGTCCTGAACCTGTCC
CTAGGTGAGAGCTGCCAAGTCCAGATTCTTCTGATGTAG
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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Restriction Sites: SgfI-MluI



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<b>ACCN:</b>	NM_178326
<b>Insert Size:</b>	1143 bp
<b>OTI Disclaimer:</b>	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).
<b>OTI Annotation:</b>	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
<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:</b>	<u><a href="#">NM_178326.2</a></u>
<b>RefSeq Size:</b>	2912 bp
<b>RefSeq ORF:</b>	1143 bp
<b>Locus ID:</b>	23192
<b>UniProt ID:</b>	<u><a href="#">Q9Y4P1</a></u>
<b>Cytogenetics:</b>	2q37.3
<b>Protein Families:</b>	Protease
<b>Protein Pathways:</b>	Regulation of autophagy
<b>MW:</b>	42.6 kDa

**Gene Summary:**

Autophagy is the process by which endogenous proteins and damaged organelles are destroyed intracellularly. Autophagy is postulated to be essential for cell homeostasis and cell remodeling during differentiation, metamorphosis, non-apoptotic cell death, and aging. Reduced levels of autophagy have been described in some malignant tumors, and a role for autophagy in controlling the unregulated cell growth linked to cancer has been proposed. This gene encodes a member of the autophagin protein family. The encoded protein is also designated as a member of the C-54 family of cysteine proteases. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (2) uses an alternate splice site in the 3' coding region, compared to variant 1, that causes a frameshift. The resulting isoform (b) is shorter and has a distinct C-terminus compared to isoform a.