

Product datasheet for **RG216453**

ATG4B (NM_178326) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ATG4B (NM_178326) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ATG4B
Synonyms:	APG4B; AUTL1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG216453 representing NM_178326 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGACGCAGCTACTCTGACCTACGACACTCTCCGGTTTGCTGAGTTTGAAGATTTCTGAGACCTCAG
AGCCCGTTTGGATACTGGGTAGAAAATACAGCATTTTTCACAGAAAAGGACGAGATCTTGCTGATGTGGC
ATCTAGACTTTGGTTTACATACAGGAAAACCTTCCAGCCATTGGGGGACAGGCCCCACCTCGGACACA
GGCTGGGGCTGCATGCTGCGGTGTGGACAGATGATCTTTGCCAAGCCCTGGTGTCCGGCACCTAGGCC
GAGATTGGAGGTGGACACAAAGGAAGAGGCAGCCAGACAGCTACTTCAGCGTCTCAACGCATTCATCGA
CAGGAAGGACAGTTACTACTCCATTACCAGATAGCGCAAATGGGAGTTGGCGAAGGCAAGTCCATAGGC
CAGTGGTACGGGCCAACACTGTCGCCAGGTCCTGAAGAAGCTTGCTGTCTCGATACGTGGAGCTCCT
TGGCGGTCCACATTGCAATGGACAACACTGTTGTGATGGAGGAAATCAGAAGTTGTGCAGGACCAGCGT
TCCCTGTGCAGGCCCACTGCGTTTCTGCAGATTCGACCGGCACTGCAACGGATTCCCTGCCGGAGCT
GAGGTCACCAACAGGCCGTCGCCATGGAGACCCCTGGTACTTCTCATTCCCCTGCGCCTGGGGCTCACGG
ACATCAACGAGGCCTACGTGGAGACGCTGAAGCACTGCTTCATGATGCCCCAGTCCCTGGGCGTCATCGG
AGGGAAGCCCAACAGCGCCCACTACTTCATCGGCTACGTTGGTGGAGGAGCTCATCTACCTGGACCCCA
ACCAGCGACCCAGCCGTGGAGCCCACTGATGGCTGCTTCATCCCGACGAGAGCTTCCACTGCCAGCACC
CGCCGTGCCGATGAGCATCGCGGAGCTTGACCCGTCATCGCTGTGGGGTTTTCTGTAAGACTGAAGA
TGACTTCAATGATTGGTGCCAGCAAGTCAAAAAGCTGTCTCTGCTTGGAGGTGCCCTGCCATGTTTGAG
CTGGTGGAGCTGCAGCCTTACATCTGGCTGCCCGACGTCCTGAACCTGTCCCTAGGTGAGAGCTGCC
AAGTCCAGATTCTCTGATG

ACCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG216453 representing NM_178326
 Red=Cloning site Green=Tags(s)

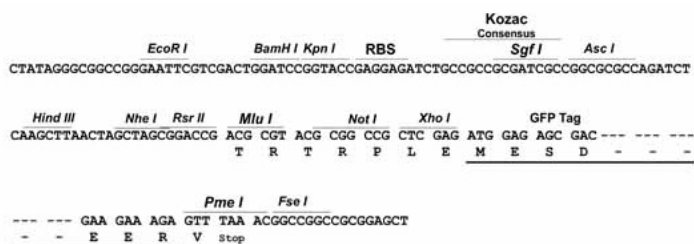
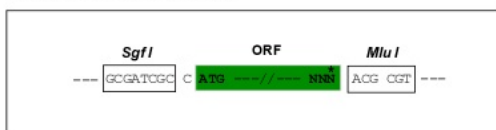
MDAATLYDTLRFAEFEDFPETSEPVWILGRKYSIFTEKDEILSDVASRLWFTYRKNFPAIGGTGPTSDT
 GWGMLRCGQMIFAQALVCRHLGRDWRWTQRKRQPSYFVNLAFIDRKDSYYSIHQIAQMGVGEKSGIG
 QWYGPNTVAQVLKLAVIDTWSSLAHVHIAMDNTVVMEEIRRLCRTSVPCAGATAFPADSDRHCNGFPAGA
 EVTNRPSWRPLVLLIPLRLGLTDINEAYVETLKHCFMMPQSLGVIGGKPNHAHYFIGYVGEELIYLDPH
 TTQPAVEPTDGCFIGPDESFHCQHPPCRMSIAELDPSIAVGFFCKTEDDFNDWCQQVKLLSLLGGALPMFE
 LVELQPSHLACPDVNLNLGESCQVQILLM

TRTRPLE - GFP Tag - V

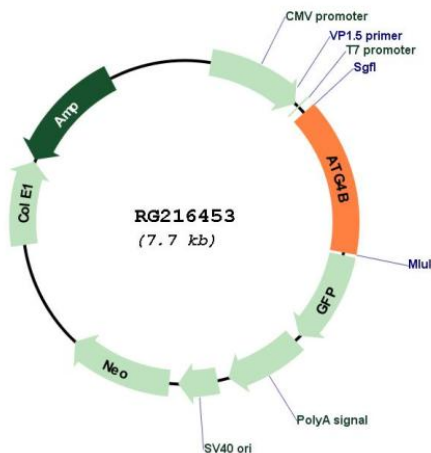
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_178326

ORF Size:	1140 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:	<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_178326.3
RefSeq Size:	2912 bp
RefSeq ORF:	1143 bp
Locus ID:	23192
UniProt ID:	Q9Y4P1
Cytogenetics:	2q37.3
Protein Families:	Protease
Protein Pathways:	Regulation of autophagy
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]