

Product datasheet for RC215833

ATG4A (NM_178270) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ATG4A (NM_178270) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ATG4A
Synonyms:	APG4A; AUTL2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC215833 representing NM_178270 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGTCAGTTTTATCCAAGTATGAAGATCAGATTACTATTTTCACTGACTACCTAGAAGAATATCCAG
ATACAGATGAGCTGGTATGGATCTTAGGGAAGCAGCATCTCCTTAAAACAGAAAAATCTAAGCTGTTGTC
TGATATAAGTGCTCGTCTATGGTTACATACAGAAGGAAATTTTACCAATTGGTGGAACGGGCCCTTCA
TCAGATGCTGGTTGGGGATGTATGCTACGCTGTGGACAGATGATGCTGGCTCAAGCCCTTATCTGTAGAC
ACTTGGGAAGGGACTGGAGCTGGGAGAAAACAAAAGAACAACCCAAAGAATACCAACGCATCCTACAGTG
CTTCTTAGATAGAAAAGATTGTTGCTACTCTATCCATCAAATGGCACAAATGGGTGTAGGAGAAGGGAAA
TCAATTGGAGAATGGTTTGGACCAATACAGTTGCACAGGTGTTAAAAAACTTGCTTTATTTGACGAAT
GGAATTCCTTGGCTGTTTATGTTTCAATGGATAACACAGTGGTCAATTGAAGATATCAAAAAATGTGCCG
TGTCTTCCCTTGAGTGTGACACAGCTGGTGACAGGCCCTCCCGATTCTTAACTGCTTCAAACCAGAGT
GACGAGCTCATCTTCTGGACCCATACAACCCAGACCTTTGTTGACTGAAGAGAATGGAACGGTTA
ATGACCAGACTTCCATTGCCTGCAGTCCCACAGCGAATGAACATCCTAAACCTGGATCCTTCAGTTGC
ATTGGGATTTTTCTGCAAAGAAGAAAAAGACTTTGATAACTGGTGTAGCCTTGTTCAGAAGGAAATCTA
AAGGAGAATTTAAGGATGTTTGAATTAGTTCAGAAACATCCATCACACTGGCCTCCCTTTGTACCTCCAG
CCAAGCCAGAAGTGACAACCACTGGGGCAGAATTCATTGACTCTACTGAGCAACTGGAGGAGTTTGATCT
GGAGGAAGATTTTGAGATTCTGAGTGTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC215833 representing NM_178270
Red=Cloning site Green=Tags(s)

MESVL SKYEDQITIFTDYLEEYPDTDEL VWILGKQHLLKTEKSKLLSDISARLWFTYRRKFSPIGGTGPS
SDAGWGMLRCGQMMLAQUALICRHLGRDWSWEKQKEQPKEYQRILQCFLDRKDCCYSIHQMAQMGVGEK
SIGEWFGPNTVAQVLKLLALFDEWNSLAVYVSMNDTVVIEDIKMKRVLPLSADTAGDRPPDSL TASNQS
DELIFLDPHTTQTFVDTEENGTVNDQTFHCLQSPQRMNINLNDPSVALGFFCKEEKDFDNWCSLVQKEIL
KENLRMFELVQKHPSPWPPFVPPAKPEVTTTGAEFIDSTEQLLEEDFEILSV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1276_g10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_178270

ORF Size: 1008 bp

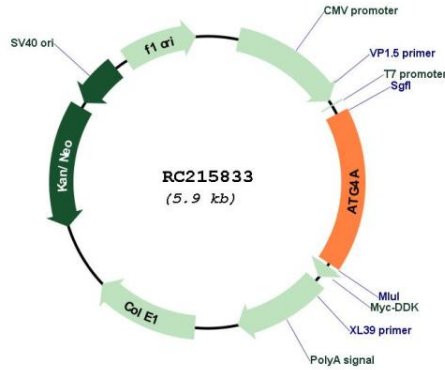
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

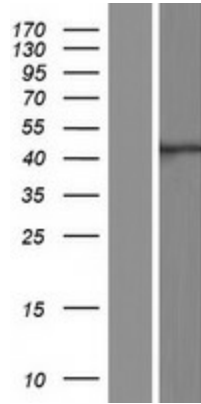
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_178270.3 , NP_840054.1
RefSeq Size:	2117 bp
RefSeq ORF:	1011 bp
Locus ID:	115201
UniProt ID:	Q8WYN0
Cytogenetics:	Xq22.3
Protein Families:	Protease
Protein Pathways:	Regulation of autophagy
MW:	38.4 kDa
Gene Summary:	<p>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. [provided by RefSeq, Mar 2016]</p>

Product images:



Circular map for RC215833



Western blot validation of overexpression lysate (Cat# [LY405989]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215833 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).