

Product datasheet for RC236615

ATG5 (NM 001286108) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: ATG5 (NM_001286108) Human Tagged ORF Clone

Tag: Myc-DDK

Symbol: ATG5

Synonyms: APG5; APG5-LIKE; APG5L; ASP; hAPG5; SCAR25

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

Cell Selection: Neomycin

ORF Nucleotide >RC236615 representing NM_001286108
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGACAGATGACAAAGATGTGCTTCGAGATGTGTGTTTGGACGAATTCCAACTTGTTTCACGCTATATC
AGGATGAGATAACTGAAAGGGAAGCAGAACCATACTATTTGCTTTTGCCAAGAGTAAGTTATTTGACGTT
GGTAACTGACAAAGTGAAAAAGCACTTTCAGAAGGTTATGAGACAAGAAGACATTAGTGAGATATGGTTT
GAATATGAAGGCACACCACTGAAATGGCATTATCCAATTGGTTTTGCTATTTGATCTTCTTTGCATCAAGTT
CAGCTCTTCCTTGGAACATCACAGTACATTTTAAGAGTTTTCCAGAAAAAGACCTTCTGCACTGTCCATC
TAAGGATGCAATTGAAGCTCATTTTATGTCATGTATGAAAGAAGCTGATGCTTTAAAACATAAAAGTCAA
GTAATCAATGAAATGCAGAAAAAAAGATCACAAGCAACTCTGGATGGGATTGCAAAATGATTTGACCAGTT
TTGGGCCATCAATCGGAAACTCATGGAATATCCTGCAGAAGAAAATGGATTTCGTTATATCCCCTTTAGA
ATATATCAGACAACGACTGAAAGACCTTTCATTCAGAAGCTGTTTCCTCCTGTGGCTGCAGATGGACAGT
TGCACACAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



Protein Sequence: >RC236615 representing NM_001286108

Red=Cloning site Green=Tags(s)

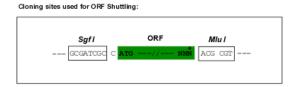
MTDDKDVLRDVWFGRIPTCFTLYQDEITEREAEPYYLLLPRVSYLTLVTDKVKKHFQKVMRQEDISEIWF EYEGTPLKWHYPIGLLFDLLASSSALPWNITVHFKSFPEKDLLHCPSKDAIEAHFMSCMKEADALKHKSQ VINEMQKKDHKQLWMGLQNDLTSFGPSIGNSWNILQKKMDFVISPLEYIRQRLKDLSFRSCFVLWLQMDS CTH

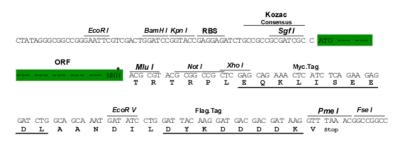
TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Restriction Sites:

Sgfl-Mlul

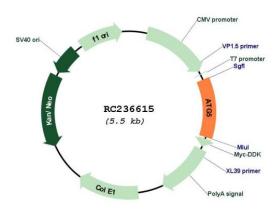
Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001286108

ORF Size: 639 bp



ATG5 (NM_001286108) Human Tagged ORF Clone - RC236615

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: 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 001286108.1</u>, <u>NP 001273037.1</u>

RefSeq Size: 3256 bp
RefSeq ORF: 642 bp
Locus ID: 9474
UniProt ID: Q9H1Y0

Cytogenetics: 6q21

Protein Families: Druggable Genome

Protein Pathways: Regulation of autophagy, RIG-I-like receptor signaling pathway

MW: 25.7 kDa

Gene Summary: The protein encoded by this gene, in combination with autophagy protein 12, functions as an

E1-like activating enzyme in a ubiquitin-like conjugating system. The encoded protein is involved in several cellular processes, including autophagic vesicle formation, mitochondrial quality control after oxidative damage, negative regulation of the innate antiviral immune response, lymphocyte development and proliferation, MHC II antigen presentation, adipocyte differentiation, and apoptosis. Several transcript variants encoding different protein isoforms

have been found for this gene. [provided by RefSeq, Sep 2015]