

## **Product datasheet for SC334382**

## 9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com

CN: techsupport@origene.cn

OriGene Technologies, Inc.

## ATG5 (NM\_001286107) Human Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** ATG5 (NM\_001286107) Human Untagged Clone

Tag: Tag Free Symbol: ATG5

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

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >NCBI ORF sequence for NM\_001286107, the custom clone sequence may differ by one or

more nucleotides

ATGCATTATCCAATTGGTTTGCTATTTGATCTTCTTGCATCAAGTTCAGCTCTTCCTTGGAACATCACAG
TACATTTTAAGAGTTTTCCAGAAAAAAGACCTTCTGCACTGTCCATCTAAGGATGCAATTGAAGCTCATTT
TATGTCATGTATGAAAGAAGCTGATGCTTTAAAACATAAAAGTCAAGTAATCAATGAAATGCAGAAAAAA
GATCACAAGCAACTCTGGATGGGATTGCAAAATGACAGATTTGACCAGTTTTTGGGCCATCAATCGGAAAC
TCATGGAATATCCTGCAGAAGAAAATGGATTTCGTTATATCCCCTTTTAGAATATATCAGACAACGACTGA
AAGACCTTTCATTCAGAAGCTGTTTCGTCCTGTGGCTGCAGATGGACAGTTGCACACACTAGGAGATCTC
CTCAAAGAAGTTTGTCCTTCTGCTATTGATCCTGAAGATGAACAACATCTGAGCTACCCGGATAATTTTCT
GAATTGAGCCAATGTTGGAAACACCTCTGCAGTGGCTGAACAACTCTGAGCTACCCCGGATAATTTTCT

Restriction Sites: Sgfl-Mlul

**ACCN:** NM 001286107

**OTI Disclaimer:** 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).

**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).



TCATATTAGTATCATCCCACAGCCAACAGATTGA



**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 001286107.1</u>, <u>NP 001273036.1</u>

RefSeq Size: 3132 bp
RefSeq ORF: 594 bp
Locus ID: 9474
UniProt ID: Q9H1Y0
Cytogenetics: 6q21

**Protein Families:** Druggable Genome

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

**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]

Transcript Variant: This variant (3) lacks an exon in the 5' coding region and initiates

translation at an alternate start codon, compared to variant 1. The encoded isoform (b) has a

distinct N-terminus and is shorter than isoform a.