

Product datasheet for SC333451

ATG5 (NM_001286111) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: ATG5 (NM_001286111) Human Untagged Clone

Tag: Tag Free Symbol: ATG5

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

Mammalian Cell Neomycin

Selection:

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

Fully Sequenced ORF: >SC333451 representing NM_001286111.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGACAGATGACAAAGATGTGCTTCGAGATGTGTGGTTTGGACGAATTCCAACTTGTTTCACGCTATAT CAGGATGAGATAACTGAAAGGGAAGCAGAACCATACTATACAGATTTGACCAGTTTTGGGCCATCAATC GGAAACTCATGGAATATCCTGCAGAAGAAAATGGATTTCGTTATATCCCCTTTAGAATATATCAGACAA CGACTGAAAGACCTTTCATTCAGAAGCTGTTTCGTCCTGTGGCTGCAGATGGACAGTTGCACACACTAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: Sgfl-Mlul

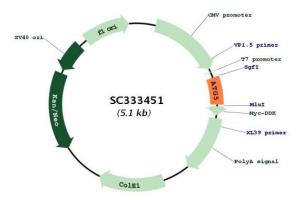
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Plasmid Map:



ACCN: NM_001286111

Insert Size: 276 bp

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).

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.



ATG5 (NM_001286111) Human Untagged Clone - SC333451

RefSeq: <u>NM 001286111.1</u>

 RefSeq Size:
 2890 bp

 RefSeq ORF:
 276 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: 10.9 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]

Transcript Variant: This variant (5) lacks three alternate exons in the 5' coding region, which results in a frameshift in the remaining coding region, compared to variant 1. The encoded isoform (d) has the same N-terminus but is otherwise distinct and shorter than isoform a.