

## Product datasheet for SC335944

### ATG4D (NM\_001281504) Human Untagged Clone

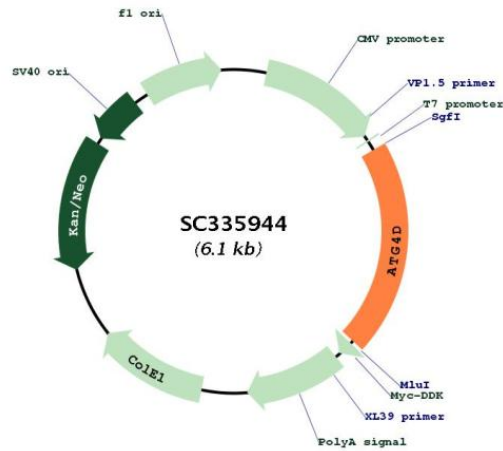
#### Product data:

Product Type:	Expression Plasmids
Product Name:	ATG4D (NM_001281504) Human Untagged Clone
Tag:	Tag Free
Symbol:	ATG4D
Synonyms:	APG4-D; APG4D; AUTL4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC335944 representing NM_001281504. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGCAAGTGCTTCATCTCGTGGGCGCTGCCCTACGTCTCCCCAGGTTGGGTGGTTAAAAGCCGGACC
AGCTTTAGCAAGATCTCCAGCATCCACCTCTGTGGCCGCCGCTACCGTTTCGAGGGCGAGGGTGACATA
CAGCGTTTCCAGCGGGACTTTGTGTCCCGCTGTGGCTCACATACCGCCGGGACTTCCCGCCCTTCTCT
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CTGTCAGGGTCAGCCTCTCCAGCCGGTACCATGGCCTGCCCGCTGGATGCCCCACGCTGGGCCACG
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GCCCCCTTTGGCCTACACCGGCTGGTGGAGCTTGGGCAGAGCTCAGGCAAGAAGGAGGACTGTTAT
GGGCCATCGTAGTGGCACACATCCTCAGGAAAGCCGTGGAGAGCTGCTCCGACGTCACCCGCTGGTG
GTGTACGTTTCTCAGGACTGCACAGTGTACAAGGCGGATGTGGCACGCCTGGTGGCCAGGCCAGACCCC
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TATGTGCCCTGCGTGAAGAACTCCTGCGTTGCGAGCTGTGCCTGGGCATCATGGGTGGGAAACCGCA
CACTCACTGTACTTCATTGGCTACCAAGATGACTTCTGCTGTACTGGACCCTCACTACTGCCAGCCC
ACTGTGGATGTACAGCCAGGCCGACTTCCCTGGAGTCTTCCACTGCACCTCGCCCGCAAGATGGCC
TTTGCCAAGATGGACCCAAGCTGTACCGTGGGCTTCTATGCTGGAGACAGGAAGGAGTTTGAGACTC
TGCTCAGAGCTGACCAGGGTCTCAGCTCCTCCTCAGCCACAGAGCGGTACCCATGTTACCCTGGCC
GAGGGCCATGCTCAGGACCACAGCCTGGACGACCTCTGCTCCCAGCTCGCCAGCCACACTCCGGCTC
CCTCGCACAGGGCGGCTCCTCAGGGCCAAACGCCCCAGCTCTGAGGACTTTGTGTTTTTAA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
```

Restriction Sites: Sgfl-Mlul



**Plasmid Map:**


**ACCN:** NM\_001281504

**Insert Size:** 1236 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.

**RefSeq:** [NM\\_001281504.1](#)

**RefSeq Size:** 2070 bp

**RefSeq ORF:** 1236 bp

**Locus ID:** 84971

**UniProt ID:** [Q86TL0](#)

**Cytogenetics:** 19p13.2

**Protein Pathways:** Regulation of autophagy

**MW:** 46.4 kDa

**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 belongs to the autophagy-related protein 4 (Atg4) family of C54 endopeptidases. Members of this family encode proteins that play a role in the biogenesis of autophagosomes, which sequester the cytosol and organelles for degradation by lysosomes. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2013]

Transcript Variant: This variant (2) uses an alternate splice site in the 5' coding region and initiates translation at an alternate start codon, compared to variant 1. It encodes isoform 2, which has a shorter and distinct N-terminus, compared to isoform 1.