

## Product datasheet for **SC326118**

### ATG7 (NM\_001144912) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ATG7 (NM_001144912) Human Untagged Clone
Tag:	Tag Free
Symbol:	ATG7
Synonyms:	APG7-LIKE; APG7L; GSA7
Vector:	<u>pCMV6 series</u>



[View online »](#)

**Fully Sequenced ORF:** >NCBI ORF sequence for NM\_001144912, the custom clone sequence may differ by one or more nucleotides

```

ATGGCGGCAGCTACGGGGGATCCTGGACTCTCTAACTGCAGTTTGCCCTTTTAGTAGT
GCCTTGGATGTTGGGTTTTGGCATGAGTTGACCCAGAAGAAGCTGAACGAGTATCGGCTG
GATGAAGCTCCCAAGGACATTAAGGGTTACTACTACAATGGTACTCTGCTGGCTGCCA
GCTCGCTTAACATTGGAGTTCAGTGCTTTTGACATGAGTGCTCCACCCAGCCCGTTGC
TGCCAGCTATTGGAACACTGTATAACACCAACACACTCGAGTCTTTCAAGACTGCAGAT
AAGAAGCTCCTTTTGGAACAAGCAGCAAATGAGATATGGGAATCCATAAAATCAGGCACT
GCTCTTGA AAAACCTGTACTCCTCAACAAGTTCCTCCTCTTGACATTTGCAATTGAAGCA
CTAGAGTGTGCATATGATAATCTTTGTCAAACAGAAGGAGTCACAGCTCTTCCTTACTTC
TTAATCAAGTATGATGAGAACATGGTGCTGGTTTCCTTGCTTAAACTACAGTGATTTTC
TTCCAAGGTCAAAGGACGAAGATAACAATTGGTGTATATGATCCCTGTAACCTAGCCAG
TACCCTGGATGGCCTTTGAGGAATTTTTGGTCTAGCAGCCACAGATGGAGTAGCAGT
TTCCAGTCTGTTGAAGTGTGTTGCTTCCGTGACCGTACCATGCAGGGGGGAGAGACGTT
GCCACAGCATCATCTTGAAGTGAAGCTTCCAGAAATGGCATTTAGCCAGATTGCTCT
AAAGCAGTTGGATGGGAAAAGAACCAGAAAGGAGGCATGGGACCAAGGATGGTGAACCTC
AGTGAATGTATGGACCCTAAAAGTTAGCTGAGTCATCAGTGGATCTAAATCTCAAAGT
ATGTGTTGGAGATTGGTTCTACTTTAGACTTGGACAAGGTTGTGTCTGTCAAATGTCTG
CTGCTTGGAGCCGGCACCTTGGGTTGCAATGTAGCTAGGACGTTGATGGGTTGGGGCGTG
AGACACATCACATTTGTGGACAATGCCAAGATCTCCTACTCCAATCCTGTGAGGCAGCCT
CTCTATGAGTTTGAAGATTGCCATAGGGGGTGGTAAGCCCAAGGCTCTGGCAGCAGCGGAC
CGGCTCCAGAAAAATTTCCCGGTGTGAATGCCAGAGGATTCAACATGAGCATACTATG
CCTGGGCATCCAGTGAATCTCCAGTGTCACTCTGGAGCAAGCCCGCAGAGATGTGGAG
CAACTGGAGCAGCTCATGAAAAGCCATGATGTCGTCTTCTTATTGATGGACACCAGGGAG
AGCCGGTGGCTTCTGCGCTCATTGCTGCAAGCAAGAGAAAGCTGGTCATCAATGCTGCT
TTGGGATTTGACACATTTGTTGTCATGAGACATGGTCTGAAGAAACCAAAGCAGCAAGGA
GCTGGGGACTTGTGTCAAACCACCCTGTGGCATCTGCTGACCTCCTGGGCTCATCGCTT
TTTGCCAACATCCCTGGTTACAAGCTTGGCTGCTACTTCTGCAATGATGTGGTGGCCCA
GGAGATTAACACCAGAGACCGGACCTTGGACCAGCAGTGCAGTGTGAGTCGTCAGGACTG
GCCGTGATTGCAGGAGCCCTGGCCGTGGAATTGATGGTATCTGTTTTGCAGCATCCAGAA
GGGGGCTATGCCATTGCCAGCAGCAGTGCAGTGCAGTGCAGTGCAGTGCAGTGCAGTGC
GGGCTTGTGCCTCACCAGATCCGGGGATTCTTTACGGTTTGATAATGCCTTCCCGTC
AGCCTGGCATTGACAAATGTACAGCTTGTCTTCCAAAATCTGGGACATGAGCGATGAT
GAGACCATC

```

- Restriction Sites:** Please inquire
- ACCN:** NM\_001144912
- 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).
- OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
- 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\\_001144912.1](#), [NP\\_001138384.1](#)

**RefSeq Size:** 4819 bp

**RefSeq ORF:** 1872 bp

**Locus ID:** 10533

**UniProt ID:** [O95352](#)

**Cytogenetics:** 3p25.3

**Protein Pathways:** Regulation of autophagy

**Gene Summary:** This gene encodes an E1-like activating enzyme that is essential for autophagy and cytoplasmic to vacuole transport. The encoded protein is also thought to modulate p53-dependent cell cycle pathways during prolonged metabolic stress. It has been associated with multiple functions, including axon membrane trafficking, axonal homeostasis, mitophagy, adipose differentiation, and hematopoietic stem cell maintenance. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2015]  
Transcript Variant: This variant (3) encodes isoform c.