

## Product datasheet for **SC102914**

### ATG4D (NM\_032885) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ATG4D (NM_032885) Human Untagged Clone
Tag:	Tag Free
Symbol:	ATG4D
Synonyms:	APG4-D; APG4D; AUTL4
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_032885, the custom clone sequence may differ by one or more nucleotides

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ATGAACTCAGTGTGCGCCGCCGCCGCGCAGTACCGGAGCAGCAGCCCGGAGGACGCGCGCCGCCGCCCG
AGGCCCGCAGGCCCGGGGTCCCAGAGGCCAGACCCCAACGGCCTGGGGCCTTCCGGAGCCAGCGGCC
CGCTCTTGGCTCTCCCGGGCTGGCCGAGTGAGCCGACGAAGTGGACAAGTTCAAGGCCAAGTTCCTG
ACAGCCTGGAACAACGTCAAGTACGGTTGGGTGGTTAAAAGCCGGACCAGCTTTAGCAAGATCTCCAGCA
TCCACCTCTGTGGCCGCCGCTACCGTTTCGAGGGCGAGGGTGACATACAGCGTTTCCAGCGGGACTTGT
GTCCCGCCTGTGGCTCACATACCGCCGGACTTCCGCCCCCTTCTGGGGCTGCCTGACCTCGGACTGT
GGCTGGGGGTGCATGTTACGCAGCGGCCAGATGATGCTGGCACAGGGCCTTCTGCTGCATTTCTGCCCA
GAGACTGGACATGGGCCGAGGGCATGGGCCTGGGCCCCCTGAGCTGTCAGGGTCAAGCCTCTCCAGCCG
GTACCATGGGCCTGCCCGCTGGATGCCCCACGCTGGGCCCAGGGTGGCCCTGAGCTGGAGCAGGAACGC
CGGCACCGGCAGATTGTGCTCTGGTTCGCCGACCACCCCGGGCCCTTTGGCCTACACCGGCTGGTGG
AGCTTGGGCAGAGCTCAGGCAAGAAGGCAGGTGACTGGTATGGGCCATCGCTAGTGGCACACATCCTCAG
GAAAGCCGTGGAGAGTCTCCGACGTCACCCGCTGGTGGTGTACGTTTCTCAGGACTGCACAGTGTAC
AAGGCGGATGTGGCACGCCTGGTGGCCAGGCCAGACCCACAGCCGAGTGAAGTCTGTGGTCATCCTGG
TGCCCGTGGACTGGGTGGCGAGACTCTCAACCCCGTGTATGTGCCCTGCGTGAAGGAACCTCGGTTG
CGAGCTGTGCTGGGCATCATGGGTGGGAAACCGGACACTCACTGTACTTATTGGCTACCAAGATGAC
TTCTGTGTACCTGGACCCTCACTACTGCCAGCCCACTGTGGATGTAGCCAGGCCGACTTCCCTGG
AGTCTTCCACTGCACCTCGCCCCGCAAGATGGCCTTTGCCAAGATGGACCCAAGCTGTACCGTGGGCTT
CTATGCTGGAGACAGGAAGGAGTTTGGACACTCTGCTCAGAGCTGACCAGGGTCTCAGCTCCTCCTCA
GCCACAGAGCGGTACCCCATGTTACCCTGGCCGAGGGCCATGCTCAGGACCACAGCCTGGACGACCTCT
GCTCCAGCTCGCCAGCCCACTCCGGCTCCCTCGCACAGGGCGGCTCCTCAGGGCCAAACGCCCCAG
CTCTGAGGACTTTGTGTTTTATAA
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<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for NM_032885 unedited GCACGAGGCCCGAGTGAGCCTGGACGAATGGACAAGTTCAAGGCCAAGTTCTGACAGCC TGGAAACAACGTCAAGTACGGTTGGGTGGTTAAAAGCCGGACCAGCTTTAGCAAGAGCTCC AGCATCCACCTCTGTGGCCTGCCGCTACCGTTTCGAGGGCGAGGGTGACATACAGCGTTT CCAGCGGGACTTTGTGTCCCGCTGTGGCTCACATACCGCCGGGACTTCCCGCCCTTCC TGGGGGCTGCCTGACCTCGGACTGTGGCTGGGGTGCATGTTACGCAGCGGCCAGATGAT GCTGGCACAGGGCCTTCTGCTGCATTTCTGCCAGAGACTGGACATGGGCCGAGGGCAT GGCCTGGGCCCCCTGAGCTGTACGGGTGAGCCTCTCCAGCCGGTACCATGGGCCTGC CCGCTGGATGCCCCACGCTGGGCCAGGGTGCCCTGAGCTGGAGCAGGAACGCCCGCA CCGGCAGATTGTCTCTGGTTCGCCGACCACCCCGGGCCCTTTGGCCTACACCGCT GGTGGAGCTTGGGCAGAGCTCAGGCAAGAAGGAAAGCCGTGGAGAGCTGCTCCGACGTCA CCCGCCTGGTGGTGTACGTTTCTCAGGACTGCACAGTGTACAAGGCTGGATGTGGCACGC CTGGTGGCCAGGCCAGACCCCGAGTGGAAAGTCTGTGGTCACTGGTGCCCGTGC GACTGGGTGGCGAGACTCTCAACCCGTTATGTGCCCTGCGTGAAGGACTCCTGCGTGC GAGCTGTGCCTGGCATCATGGT
<b>3' Read Nucleotide Sequence:</b>	>OriGene 3' read for NM_032885 unedited CAGCCACAGTTCCCCAGGGGGCTTTGGGACAGGGAGGGCCCGGGCGTCCAGTGCAAAC ACAGTACGTGAGTCAGGCCCTGAGGGGGTGCCTGGGCTCCTCTCCCTACCCTGATAG GAGGGCCCGCTGGTGGGAGACAGGTGTATGGGCTCTGTGGGCTGTCCCTGGCTGAAT GGCCCCAGACTGGTTGCAGCTGGGCTTGAGGGGCTGACAAAGGAAGTACCATCATCACT GCCAGAGCTCAAGATCCCACACCCGACATGACATAAATAAAAAATAAATAGTGTGTAT CTTTCCCTCATCCCTCCCTTTATAAAAACACAAAGTCTCAGAGCTGGGGCGTTTGGC CCTGAGGAGCCCGCTGTGCGAGGGAGCCGAGTGTGGGCTGGGCGAGCTGGGAGCAGAG GTCGTCCAGGCTGTGGTCTGAGCATGGCCCTCGGCCAGGGTGAACATGGNGTACCCTC TGTGGCTGAGGAGGAGCTGANGACCCTGGTCTGAGCAGAGTGTCTCANACTCCTT CCTGTCTCCAGCATAGAAGCCCACGGTACAGCT
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_032885
<b>Insert Size:</b>	1850 bp
<b>OTI Disclaimer:</b>	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).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_032885.2</a> , <a href="#">NP_116274.2</a>
<b>RefSeq Size:</b>	1996 bp

RefSeq ORF: 993 bp

Locus ID: 84971

UniProt ID: [Q86TL0](#)

Cytogenetics: 19p13.2

Domains: Peptidase\_C54

Protein Pathways: Regulation of autophagy

**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 (1) encodes the longer isoform (1).