

## Product datasheet for SC124770

### ATG4A (NM\_178271) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ATG4A (NM_178271) Human Untagged Clone
Tag:	Tag Free
Symbol:	ATG4A
Synonyms:	APG4A; AURL2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL6</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC124770 sequence for NM_178271 edited (data generated by NextGen Sequencing)

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ATGCTACGCTGTGGACAGATGATGCTGGCTCAAGCCCTTATCTGTAGACACTTGGGAAGG
GACTGGAGCTGGGAGAAAACAAAAAGAACAACCCAAAGAATACCAACGCATCCTACAGTGC
TTCTTAGATAGAAAAGATTGTTGCTACTCTATCCATCAAATGGCACAATGGGTGTAGGA
GAAGGGAAATCAATTGGAGAATGGTTTGGACCAAATACAGTTGCACAGGTGTTAAAAAAA
CTTGCTTTATTTGACGAATGGAATTCCTTGGCTGTTTATGTTTCAATGGATAACACAGTG
GTCATTGAAGATATCAAAAAATGTGCCGTGCCTTCCCTTGAGTGCTGACACAGCTGGT
GACAGGCCTCCCGATTCTTTAACTGCTCAAACCAGAGTAAGGGCACCTCTGCCTACTGC
TCAGCCTGGAAACCCCTGCTGCTCATTGTGCCCTTCGCCTGGGCATAAACCAAATCAAT
CCTGTCTATGTTGATGCATTCAAAGAGTGTTTAAGATGCCACAGTCTTTAGGGCATT
GGAGGAAAACCAATAACGCGTATTATTTTCATAGGATTCTTAGGTGACGAGCTCATCTTC
TTGGACCCCTCATACAACCAGACCTTTGTTGACTGAAGAGAATGGAACGGTTAATGAC
CAGACTTTCATTGCCTGCAGTCCCCACAGCGAATGAACATCCTAAACCTGGATCCTTCA
GTTGCATTGGGATTTTTCTGCAAGAAGAAAAAGACTTTGATAACTGGTGTAGCCTTGT
CAGAAGGAAATTTCTAAAGGAGATTTAAGGATGTTTGAATTAGTTCAGAAACATCCATCA
CACTGGCCTCCCTTTGTACCTCCAGCCAAGCCAGAAGTGACAACCACTGGGGCAGAATTC
ATTGACTCTACTGAGCAACTGGAGGAGTTTGTATCTGGAGGAAGATTTTGTAGATTCTGAGT
GTGTAG

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Clone variation with respect to NM\_178271.1



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<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for NM_178271 unedited ATATCCCCCGCCCGTTGCAGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAG CAGAGCTCATTTAGGTGACACTATAGAATACAAGCTACTTGTCTTTTTGCAGCGGCCGC GAATTCGGCACGAGGGTGGAAATTGGCCAGGATGACAGCTGGAGAATGGAGTCAGTTTTA TCCAAGTATGAAGATCAGATTACTATTTTCACTGACTACCTAGAAGAATATCCAGATACA GATGAGCTGGTATGGATCTTAGGGAAGCAGCATCTCCTTAAAAACAGAAAAATCTAAGCTG TTGTCTGATATAAGTCTCGTCTATGGTTTACATACAGAAGGAAATTTTACCAATTGGT AGGTGGAACGGGCCCTTCATCAGATGCTGGTTGGGGATGTATGCTACGCTGTGGACAGAT GATGCTGGCTCAAGCCCTTATCTGTAGACACTTGGGAAGGGACTGGAGCTGGGAGAAACA AAAAGAACAACCCAAAGAATACCAACGCATCCTACAGTGCTTCTTAGATAGAAAAGAGTG TTGCTACTCTATCCATCAAATGGCACAAATGGGTGTAGGAGAAGGGAAATCAATTGGAGA ATGTTTTGGACCAAATACAGTTGCACAGGTGTTAAAAAACTTGCTTTATTTGACGAATG GAATTCCTTGGCTGTTTATGTTTCAATGGATAACACAGTGGTCATTGAAGATATCAAAAA AATGTGGCTGTGCTTCCATTGAGTGTGACACAGGCTGGTGACAGGCCTCCCGATTC TTTCACTGCTTNAACCAGAGTAAGGGCACCTCTGCCTACTGCTCAGNCTGGCAACCCCT GCTGCTCATTGTGCTCCTTCGCCTGGGCATACACCAAATCAATCTGTCTATGGTGTATGCA TTCAAAGAGTGTTTTACGATGCCAGTCTTTAGGGGCATTGGAGCACACCAATAC
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_178271
<b>Insert Size:</b>	2500 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>	<u><a href="#">NM_178271.1</a></u> , <u><a href="#">NP_840055.1</a></u>
<b>RefSeq Size:</b>	2605 bp
<b>RefSeq ORF:</b>	966 bp
<b>Locus ID:</b>	115201
<b>UniProt ID:</b>	<u><a href="#">Q8WYN0</a></u>
<b>Cytogenetics:</b>	Xq22.3
<b>Protein Families:</b>	Protease
<b>Protein Pathways:</b>	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 encodes a member of the autophagin protein family. The encoded protein is also designated as a member of the C-54 family of cysteine proteases. [provided by RefSeq, Mar 2016]