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Product datasheet for SC112271

ATG9A (NM_024085) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ATG9A (NM_024085) Human Untagged Clone
Tag:	Tag Free
Symbol:	ATG9A
Synonyms:	APG9L1; mATG9; MGD3208
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene sequence for NM_024085 edited
GAATTCGGCACGAGGCCGGCCTAGCGCCGCGGGTCGCGCCGAGCCGAGCCGAGCCGAGCG
GAGCCGGCGGAGCCTCTGGAATCACCCGGGTCGCTGTTCCTGAGCAGCTGCAGAGCATCG
AGGGCTGGAGAGGAGCACATACTGTCCATGGAGCTGGTGGTCAAGGTGGACAGGGGGCGG
TGGTGATGGCGCAGTTTGACACTGAATACCAGCGCCTAGAGGCCTCCTATAGTGATTCAC
CCCCAGGGGAGGAGGACCTGTTGGTGCACGTCGCCGAGGGGAGCAAGTCACCTTGGCACC
ATATTGAAAACCTTGACCTCTTCTTCTCTCGAGTTTATAATCTGCACCAGAAGAATGGCT
TCACATGTATGCTCATCGGGGAGATCTTTGAGCTCATGCAGTTCCTCTTTGTGGTTGCCT
TCACTACCTTCCTGGTCAGCTGCGTGGACTATGACATCCTATTTGCCAACAAGATGGTGA
ACCACAGTCTTCACCCTACTGAACCCGTCAAGGTCACTCTGCCAGACGCCTTTTTGCCTG
CTCAAGTCTGTAGTGCCAGGATTCAGGAAAATGGCTCCCTTATCACCATCCTGGTCATTG
CTGGTGTCTTCTGGATCCACCGGCTTATCAAGTTCATCTATAACATTTGCTGCTACTGGG
AGATCCACTCCTTCTACCTGCACGCTCTGCGCATCCCTATGTCTGCCCTTCCGTATTGCA
CGTGGCAAGAAGTGCAGGCCCGGATCGTGCAGACGCAGAAGGAGCACCAGATCTGCATCC
ACAAACGTGAGCTGACAGAACTGGACATCTACCACCGCATCCTCCGTTTCCAGAACTACA
TGGTGGCACTGGTTAACAAATCCCTCCTGCCTCTGCGCTTCCGCCTGCCTGGCCTCGGGG
AAGCTGTCTTCTTCACCCGTGGTCTCAAGTACAACTTTGAGCTGATCCTCTTCTGGGGAC
CTGGCTCTCTGTTTCTCAATGAATGGAGCCTCAAGGCCGAGTACAAACGTGGGGGGCAAC
GGCTAGAGCTGGCCCAGCGCCTCAGCAACCGCATCCTGTGGATTGGCATCGCTAACTTCC
TGCTGTGCCCCCTCATCCTCATATGGCAAATCCTCTATGCCTTCTTCAGCTATGCTGAGG
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AGCCCGCCTCCAAGTACATGAATTGCTTCTTGTCACCTCTTTTGACACTGCTGGCCAAGA
ATGGAGCCTTCTTCGCTGGCTCCATCCTGGCTGTGCTTATTGCCCTCACCATTTATGACG
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CCGTGTGCAGGTCCTTTATCCCGGACCAGCACATGGTGTTCTGCCCTGAGCAGCTGCTCC
GCGTGATCCTCGCTCACATCCACTACATGCCTGACCACTGGCAGGGTAATGCCCACCGCT

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CGCAGACCCGGGACGAGTTTGCCCAGCTCTTCCAGTACAAGGCAGTGTTCATTTTGGAAG
AGTTGCTGAGCCCCATTGTCACACCCCTCATCCTCATCTTCTGCCTGCGCCCACGGGCCC
TGGAGATTATAGACTTCTTCCGAAACTTCACCGTGGAGGTCGTTGGTGTGGGAGATACCT
GCTCCTTTGCTCAGATGGATGTTCGCCAGCATGGTCATCCCCAGTGGCTATCTGCTGGGC
AGACAGAGGCCTCAGTGTACCAGCAAGCTGAGGATGGAAAGACAGAGTTGTCACTCATGC
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TCCCTGAAAATGCCCTCTTTACGTCTATCCAGTCCTTACAATCTGAGTCTGAGCCCCTGA
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CAGAATATGCATCCACAGAGATGAGCCTGCATGCCCTCTATATGCACCAGCTCCACAAGC
AGCAGGCCCAGGCTGAACCTGAGCGGCATGTATGGCACCGCCGGGAGAGTGATGAGAGTG
GAGAAAGCGCCCCTGATGAAGGGGGAGAGGGCGCCCGGGCCCCCCAGTCTATCCCTCGCT
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TCCCGTCTGCCTGCCATGGGACGGCTCCTCTGAGTGTTCCCTGGCCCCACGTGTGTGGTG
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CGCCCAGTGCTGCAGCCGGCTCACCTCTCTCCGCTTCTTGCACATCACTGGCCTGTGTGT
GCTGCTTGCTCCTGTTCTGTTCGCTTGCTCCCGTTCCGTTCGGCTTTTGCTTTGCGTTAG
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TTCTAAATTGTAGGAGCAGGATGGAAATACTTTGCTGCCCTTGCCATCTTTTAGGATGGG
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CTCTGGCCCGCATCTCGCTGTGCCCTGAAGGGGGATGAAGGGCGATGCCTCGCCCGAGGC
TTTGGGCTGCTGCACTGCATGCTGGGACTGCTCCTACTCTCTGTCCCCCCCCTCACCCAG
CTGTGGTCCGGCTTTGGGAGAGTGGTGAATTGCGCTGCCCGAACTCGGAGCGGAGCAGGG
TAGGGACCGTGTACAGCTTGATAACCCTTAATAAAAAGGGAGTTTGACCAGAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAACTCGAC

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_024085 unedited
CAAATTTGTATACGACTCATATAGGCGGCCGCGNATTCGGCACGAGGCCGGCCTAGCGCC
GCGGGTCGCGCCGAGCCGAGCCGAGCCGAGCGGAGCCGGCGGAGCCTCTGGAATCACCCG
GGTCGCTGTTCCTGAGCAGCTGCAGAGCATCGAGGGCTGGAGAGGAGCACATACTGTCCA
TGGAGCTGGTGGTCAAGGTGGACAGGGGGCGGTGGTGATGGCGCAGTTTGACACTGAATA
CCAGCGCCTAGAGGCCTCCTATAGTGATTCACCCCCAGGGGAGGAGGACCTGTTGGTGCA
CGTCGCCGAGGGGAGCAAGTCACCTTGGCACCATATTGAAAACCTTGACCTCTTCTTCTC
TCGAGTTTATAATCTGCACCAGAAGAATGGCTTCACATGTATGCTCATCGGGGAGATCTT
TGAGCTCATGCAGTTCCTCTTTGTGGTTGCCTTCACTACCTTCCTGGTCAGCTGCGTGGA
CTATGACATCCTATTTGCCAACAAGATGGTGAACCACAGTCTTCACCCTACTGAACCCGT
CAAGGTCACTCTGCCAGACGCCTTTTTGCCTGCTCAAGTCTGTAGTGCCAGGATTCAGGA
AAATGGCTCCCTTATCACCATCCTGGTCATTGCTGGTGTCTTCTGGATCCACCGGCTTAT
CAAGTTCATCTATAACATTTGCTGCTACTGGGAGATCCACTCCTTCTACCTGCACGCTCT
GCGCATCCCTATGTCTGCCCTTCCGTATTGCACGTGGCAAGAAGTGCAGGCCCGGNATCG
TGCAGACGCAGAAGGAGCACCAGATCTGCATCCACAAACGTGAGCTGACAGAACTGGACA
TCTACCACCGCATCCTCCGTTTCCAGACTACATGGTGGCACTGGNTAACAAATCCTNCTG
NCTCTGCGCTTNCGCCTGCCTGGNCTNNGGGNAAGCTGTCTTCTTCACCCGTGGTCTCAG
GTCN

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_024085 unedited
NGGGGCAATCCTGTTACCGTGGCCCNATCNAGNGTCGAGTTTTTTCCTTTTTTTTTTGTT
TTTTTTTTTTGTTCAAACTCCCTTTTTATTAAGGGTTATCAAGCTGTACACGGTCCCTAC
CCTGCTCCGCTCCGAGTTCGGGCAGCGCAATTCACCACTCTCCCAAAGCCGGACCACAGC
TGGGTGAGGGGTGGGACAGAGAGTAGGAGCAGTCCCAGCATGCAGTGCAGCAGCCCAAAG
CCTCGGGCGAGGCATCGCCCTTCATCCCCCTTCAGGGCACAGCGAGATGCGGGCCAGAGC
TCTTTTGCTGGGACGTACACAGCCAAGGTCACCCTCCAGCCCGGTCTGTCCCATGTGCAG
GTGATGGGGGGTACGATAAGCAGCAATGAGGGCCCAGGAAGACCTCAGTCTCCTGGGGGC
CCATCCTAAAAGATGGCAAGGGCAGCAAAGTATTTCCATCCTGCTCCTACAATTTAAAAA
CCTTCTTTTTTAGTGTCAAAATATAGCGTTGAGGGGAGCTGGACGCTAGGGTCTTCACCC
TAACGCAAAGCAAAAGCCGAACGGAACGGGAGCAAGCGAACAGAACAGGAGCAAGCAGCA
CACACAGGCCAGTGATGTGCAAGAAGCGGAGAGAGGTGAGCCGGCTGCAACACTGGGCGA
GAACTGCGGGTGAGGTAAGGGCCACAGCCTGACCTGCTCATCTATTGAGGGGGCTAGGGA
AGGTTGCAGGGGTTGAGGGTCCAGGCCCAACCTCCCCACTCCACAGTTGGCACAGGTTTC
TCCCTGCTTGGCAGCTTCTATCGTGGGCAGCCCTTTGGGGCACTTGCAGGGGTAGGTGTT
AAAGTGGCAATTCCTGTGGCTGGGCTGGGGACAAGTTTCTAGCCACACACTTTTAACACA
GGGGGTCCCTGGGGATAAAGCTT

Restriction Sites: NotI-NotI

ACCN: NM_024085

Insert Size: 4000 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

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_024085.2, NP_076990.3

RefSeq Size: 3816 bp

RefSeq ORF: 2520 bp

Locus ID: 79065

UniProt ID: Q7Z3C6

Cytogenetics: 2q35

Domains: APG9

Protein Families: Transmembrane

Gene Summary: Involved in autophagy and cytoplasm to vacuole transport (Cvt) vesicle formation. Plays a key role in the organization of the preautophagosomal structure/phagophore assembly site (PAS), the nucleating site for formation of the sequestering vesicle. Cycles between a juxta-nuclear trans-Golgi network compartment and late endosomes. Nutrient starvation induces accumulation on autophagosomes. Starvation-dependent trafficking requires ULK1, ATG13 and SUPT20H.[UniProtKB/Swiss-Prot Function]
Transcript Variant: This variant (2) lacks an internal exon in the 5' UTR, compared to variant 1. Variants 1 and 2 encode the same protein.