

## Product datasheet for **MR226916**

### **Atg9a (NM\_001003917) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Atg9a (NM_001003917) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Atg9a
Synonyms:	Apg9l1; Atg9; Atg9l1; AU019532
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR226916 representing NM\_001003917  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCACAGTTTGACACTGAATACCAGCGCTAGAGGCCTCTATAGCGATTGCCCCCGGGGAAGAGG  
 ACCTGTTGGTGCATGTGGCCGAGGGGAGCAAATCACCTTGGCACCACATTGAAAACCTTGACCTCTCTT  
 CTCTCGAGTTTATAATCTCCACCAGAAGAATGGCTTACATGTATGCTCATTGGAGAGATGTTTGAACCTC  
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 CCAACAAGATGGTGAACCACAGTCTCCATCCTACTGAGCCTGTCAAGGTCACTCTGCCAGATGCCTTTTT  
 GCCTGCCCAAGTCTGTAGTGCCAGGATTCAGGAAAATGGCTCTCTTATCACCATCCTGGTCACTTGTGGT  
 GTCTTCTGGATCCACCGCTTATCAAGTTTATCTATAACATTTGTGCTATTGGGAGATCCACTCCTTCT  
 ACCTACATGCTCTTCGGATCCCAATGTCTGCCCTTCCATACTGCACATGGCAGGAAGTTCAGGCCGGAT  
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 CCTTCTCCCTCTGCAGCCTGGAGCGGCCCTCAAGGCCGGGTTCCAGTACCATGACAGGCTCTGGAGT  
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AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
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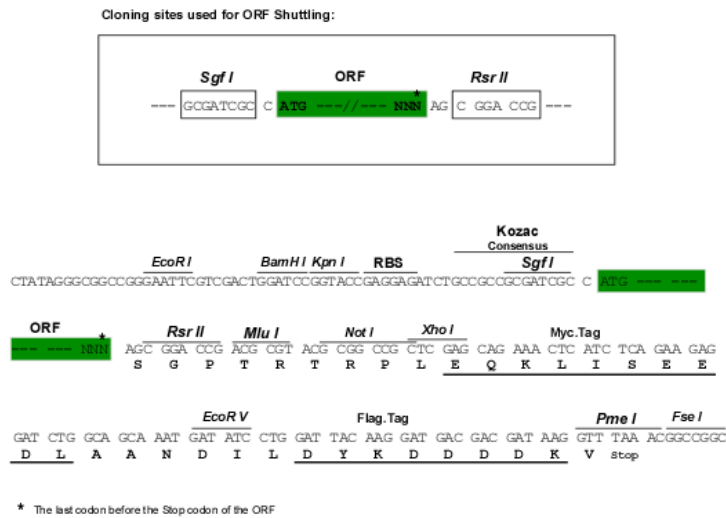
**Protein Sequence:** >MR226916 representing NM\_001003917  
Red=Cloning site Green=Tags(s)

MAQFDTEYQRLEASYSPPGEEEDLLVHVAEGSKSPWHHIENLDLFFSRVYNLHQKNGFTCMLIGEMFEL  
MQFLFVVAFTTFLVSCVDYDILFANKMVNHS LHPTVPKVTLPDAFLPAQVCSARIQENGLITILVIAG  
VFWIHRLIKFIYNICCYWEIHSFYLHALRIPMSALPYCTWQEVQARIVQTQKEHQICIHKRELTELDIYH  
RILRFQNYMVALVNKSLPLRFRLPGLGEVVFTRGLKYNFELILFWGPGSLFLNEWSLKA EYKRGGQRL  
ELAQRLSNRILWIGIANFLLCPLILIWQILYAFFSYAEVLKREPGALGARCWSLYGRCYLRFNELEHEL  
QSRLNRGYKPASKYMNCFLSPLLTLAKNGAFFAGSILAVLIALTIYDEDVLAVEHVLTTVTLLGVTVTV  
CRSFIPDQHMVFCPEQLLRVILAHIHYPDHWQGNHRSTQTRDEFAQLFQYKAVF ILEELLSPIVTPILIL  
IFCLRPRALEIIDFFRNFTVEVVGVDTCFAQMDVRQHGHPQWL SGGQTEASVYQQAEDGKTELSLMHF  
AITNPGWQPPRESTAFLGFLKEQVQRDGAAGLAQGGLLPENALFTSIQSLQSESEPLSLIANVVAGSSC  
RGPSLSRDLQGSRRADVASALRSFSPLQPGAAPQGRVPSTMTGSGVDARTASSGSSVWEGQLQSLV LSE  
YASTEMSLHALYMHQLHKQQTQAEPERHVWHRRESDESSESAP EEGGEGARAPQIPRSASYP CATPRPG  
APETTALHGGFQRRYGGITDPGTVPRGPSHF SRLPLGGWAEDGQPASRHPEPVPEEGSEDELPPQVHKV

SGP TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9003\\_f08.zip](https://cdn.origene.com/chromatograms/mm9003_f08.zip)

**Restriction Sites:** Sgfl-RsrII

**Cloning Scheme:**


**ACCN:** NM\_001003917

**ORF Size:** 2517 bp

**OTI Disclaimer:** 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](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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\\_001003917.4](#), [NP\\_001003917.2](#)

**RefSeq Size:** 3764 bp

**RefSeq ORF:** 2520 bp

**Locus ID:** 245860

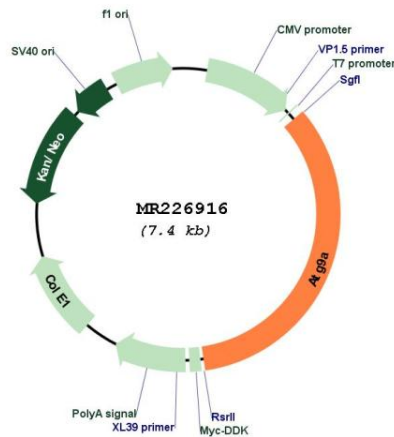
**UniProt ID:** [Q68FE2](#)

**Cytogenetics:** 1 C4

**MW:** 94.9 kDa

**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 (By similarity). Required for carbonyl cyanide m-chlorophenylhydrazone (CCCP)-induced ATG8 family proteins lipidation, a key autophagy step.[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR226916