

Product datasheet for **RC222568**

ATG9A (NM_001077198) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ATG9A (NM_001077198) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ATG9A
Synonyms:	APG9L1; mATG9; MGD3208
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC222568 representing NM_001077198
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGCAGTTTGACACTGAATACCAGCGCTAGAGGCCTCTATAGTGATTCACCCCCAGGGGAGGAGG
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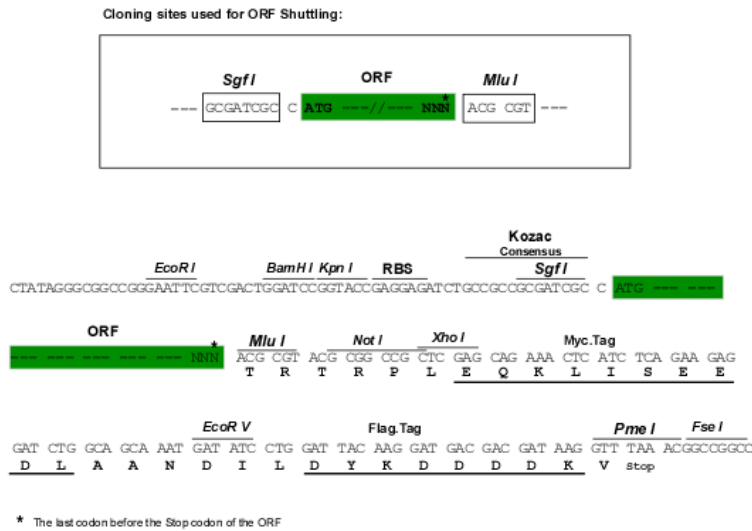
Protein Sequence: >RC222568 representing NM_001077198
Red=Cloning site Green=Tags(s)

MAQFDTEYQRLEASYSPPGEEEDLLVHVAEGSKSPWHHIENLDLFFSRVYNLHQKNGFTCMLIGEIFEL
MQFLFVVAFTTFLVSCVDYDILFANKMVNHS LHPTVPKVTLPDAFLPAQVCSARIQENGLITILVIAG
VFWIHRLIKFIYNICCYWEIHSFYLHALRIPMSALPYCTWQEVQARIVQTQKEHQICIHKRELTELDIYH
RILRFQNYMVALVNKSLPLRFRLPGLGEAVFFTRGLKYNFELILFWGPGSLFLNEWSLKA EYKRGQRL
ELAQRLSNRILWIGIANFLLCPLILIWQILYAFFSYAEVLKREPGALGARCWSLYGRCYLRFNELEHEL
QSRLNRGYKPASKYMNCFLSPLLTLAKNGAFFAGSILAVLIALTIYDEDVLAVEHVLTTVTLLGVTVTV
CRSFIPDQHMVFCPEQLLRVILAHIHYPDHWQGNHRSTQTRDEFAQLFQYKAVF ILEELLSPIVTPILIL
IFCLRPRALEIIDFFRNFTVEVVGVDTC SFAQMDVRQHGHPQWL SAGQTEASVYQQAEDGKTELSLMHF
AITNPGWQPPRESTAFLGFLKEQVQRDGAASLAQGGLLPENALFTSIQSLQSESEPLSLIANVVAGSSC
RGPPPLPRDLQGSRHRAEVASALRSFSPLQPGQAPTGRAHSTMTGSGVDARTASSGSSVWEGQLQSLV LSE
YASTEMSLHALYMHQLHKQQAQAE PERHVWHRRESDES GESAPDEGGEGARAPQSIPRSASYP CAAPRPG
APETTALHGGFQRRYGGITDPGTVPRVPSHF SRLPLGGWAEDGQSASRHPEPVPEEGSEDELPPQVHKV

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6594_f08.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:


ACCN: NM_001077198

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_001077198.3](#)

RefSeq Size: 3795 bp

RefSeq ORF: 2520 bp

Locus ID: 79065

UniProt ID: [Q7Z3C6](#)

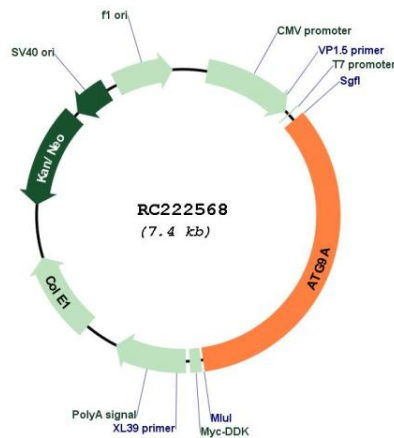
Cytogenetics: 2q35

Protein Families: Transmembrane

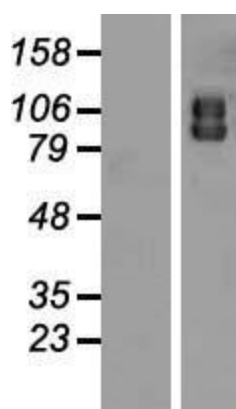
MW: 94.3 kDa

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.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC222568



Western blot validation of overexpression lysate (Cat# [LY421380]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222568 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).