

## Product datasheet for **MG208753**

### Atg9a (BC079884) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Atg9a (BC079884) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Atg9a
Synonyms:	Atg9, Atg9l1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG208753 representing BC079884  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCACAGTTTGACACTGAATACCAGCGCTAGAGGCCTCTATAGCGATTGCCCCCGGGGAAGAGG  
 ACCTGTTGGTGCATGTGGCCGAGGGGAGCAAATCACCTTGGCACACATTGAAAACCTTGACCTCTTCTT  
 CTCTCGAGTTTATAATCTCCACCAGAAGATGGCTTACATGTATGCTCATTGGAGAGATGTTTGAACCT  
 ATGCAGTTCCTCTTTGTGGTTGCCTTACCACCTTCTGGTTAGCTGTGTGGACTATGACATCCTCTTTG  
 CCAACAAGATGGTGAACCACAGTCTCCATCCTACTGAGCCTGTCAAGGTCACTCTGCCAGATGCCTTTT  
 GCCTGCCCAAGTCTGTAGTGCCAGGATTCAGGAAAATGGCTCTTATCACCATCCTGGTATTGCTGGT  
 GTCTTCTGGATCCACCGCTTATCAAGTTTATCTATAACATTTGCTGCTATTGGGAGATCCACTCCTTCT  
 ACCTACATGCTCTTCGGATCCCAATGTCTGCCCTTCCATACTGCACATGGCAGGAAGTTCAGGCCGGAT  
 TGTGCAGACGCAGAAAGAGCATCAGATCTGCATCCACAAGCGTGAGCTGACAGAGTTGGACATCTACCAT  
 CGCATCTACGTTTCCAGAACTACATGGTGGCCCTGGTGAACAAATCCCTCCTGCCTCTGCGCTTCCGTC  
 TGCCCCGGCTCGGAGAGTTGTCTTCTTCAACCGTGGCCTCAAGTACAACCTTTGAGCTCATCCTCTTCTG  
 GGGACCCGGCTCTCTGTTTCTCAATGAGTGGAGCCTCAAGGCCGAGTACAAACGTGGAGGGCAACGGCTA  
 GAGCTGGCCCAGCGTCTCAGCAACCGCATCTTGTGGATTGGCATCGCCAACCTTCTGCTGTGTCCCTCA  
 TCCTCATCTGGCAGATCCTCTATGCCTTCTTACGCTATGCCGAGGTGCTGAAGAGAGAGCCGGGGCCCT  
 GGGAGCGCTTGTGGTCACTCTATGGCCGTTGTTACCTCCGCCACTTCAATGAGCTGGAGCATGAGCTG  
 CAGTCCCGCTCAACCGAGGCTACAAGCCCGCTCCAAGTACATGAATTGCTTCTTGTACCCTGCTGA  
 CTCTGCTGGCCAAGAATGGTGCCTTCTTCCGCTCTATCCTGGCTGTGCTTATTGCCCTCACCATCTA  
 TGATGAAGATGTGTTAGCTGTGGAACACGCTCACCACGCTCACCTCCTGGGAGTCACGGTGACTGTG  
 TGACGGTCTTATCCCAGACCAGCACATGGTGTCTGCCCGAGCAGCTGCTCCGAGTGATTCTTGCAC  
 ACATCCACTACATGCCTGACCACTGGCAGGGTGTTCATCTTGGAGGAGTTGCTGAGTCCCATCGTACAC  
 CCCTCATCTCATCTTCTGCCTCCGCCCTGGGCCCTGGAGATCATAGACTTCTTCCGCAACTTTACGGT  
 CGAGGTGCTGGGTGTGGGAGACACTGCTCCTTTGCTCAGATGGACGTTCCGCCAGCATGGCCATCCTCAG  
 TGGCTGTCTGGAGGGCAGACAGAGGCTCAGTGTACCAGCAAGCCGAGGACGGGAAGACCGAGTTGTGCG  
 TCATGCACTTTGCCATCACCAATCCCGGCTGGCAGCCCCCTCG

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:**

>MG208753 representing BC079884  
 Red=Cloning site Green=Tags(s)

MAQFDTEYQRLEASYSPPGEEDLLVHVAEGSKSPWHHIENLDLFFSRVYNLHQKNGFTCLIGEMFEL  
 MQFLFVVAFTTFLVSCVDYDILFANKMVNLSLHPTPEVKVTLPD AFLPAQVCSARIQENGLITILVIAG  
 VFWIHLRIKFIYNICCYWEIHSFYLHALRIPMSALPYCTWQEVQARIVQTQKEHQICIKRELTELDIYH  
 RILRFQNYMVALVNKSLPLRFRLPGLGEVVFTRGLKYNFELILFWGPGSLFLNEWSLKAIEYKRGQR  
 ELAQRLSNRILWIGIANFLLCPLILIWQILYAFFSYAEVLKREPGALGARCWSLYGRCYLRHFNEHEH  
 QSRLNRGYKPAKYMNCFLSPLLTLAKNGAFFAGSILAVLIALTIYDEDVLAHEHVLTTVTLLGVTVT  
 CRSFIPDQHMVFCPEQLLRVILAHIHYPDHWQVHLGGVAESHRHTPHSHLLPPPSGPGDHRLLPQLY  
 RGRGGRHLLLCSDGRSPAWPSSVAVWRADRLSVPASRGREDRVVAHALCHHQSRLAAPS

**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

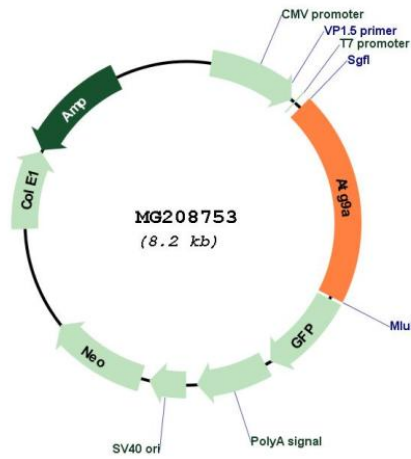
Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



**Plasmid Map:**



ACCN:	BC079884
ORF Size:	1655 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. <a href="#">More info</a>
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:	<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>
RefSeq:	<a href="#">BC079884</a> , <a href="#">AAH79884</a>
RefSeq Size:	3792 bp
RefSeq ORF:	1655 bp
Locus ID:	245860
Cytogenetics:	1 C4
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]