

Product datasheet for **MG200886**

Atg12 (NM_026217) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Atg12 (NM_026217) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Atg12
Synonyms: 4931423H11Rik; A330058M13Rik; Apg12l; Atg12l
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG200886 representing NM_026217
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCGGAAGATTCAGAGGTTGTGCTGCAGCTCCCCTCGGCTCCTGTAGGAGCCGGCGGAGAGCCTTC
CAGAGCTCTCCCGAAACAGCCACCCAGAGCCCCGTCCTCGGCTGCAGTTTCGCCCGGAACGGAGGA
ACCTCCCGGAGACACCAAGAAAAAATTGACATCCTGCTGAAGGCTGTAGGAGACTCCTATAATGAAA
ACAAAGAAATGGGCTGTGGAGCGAACCCGACCATCCAAGGACTCATTGACTTCATAAAAAGTTCTTA
AACTGGTGGCCTCGAACAGTTGTTTATTTATGTGAATCAGTCCTTGCCCTTCCCAGACCAAGAAGT
TGGAACTCTATAGAGTGTGGCAGTGATGGTAACTGGTCTGCATTACTGCAATCCCAGGCATGG
GGA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG200886 representing NM_026217
Red=Cloning site Green=Tags(s)

MSEDSEVVLQLPSAPVAGGESLPELSPETATPEPPSSAAVSPGTEPPGDTKKKIDILLKAVGDTPIMK
TKKWAVERTRTIQGLIDFIKKFLKLVASEQLFIYVQSFAPSPDQEVGTLYECFGSDGKLVLHYCKSQAW
G

TRTRPLE - GFP Tag - V

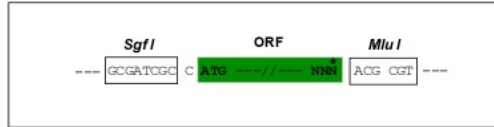
Restriction Sites: Sgfl-MluI



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Cloning Scheme:

Cloning sites used for ORF Shutting:


ACCN: NM_026217

ORF Size: 423 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_026217.3](#)
RefSeq Size: 2459 bp

RefSeq ORF: 426 bp

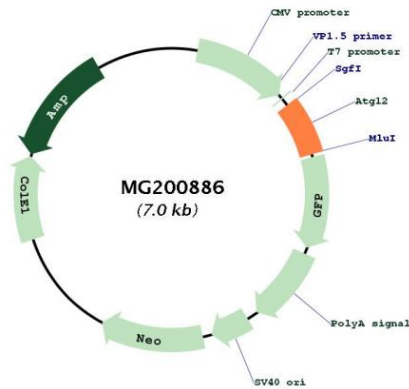
Locus ID: 67526

UniProt ID: [Q9CQY1](#)

Cytogenetics: 18 C

Gene Summary: Ubiquitin-like protein involved in autophagy vesicles formation. Conjugation with ATG5 through a ubiquitin-like conjugating system involving also ATG7 as an E1-like activating enzyme and ATG10 as an E2-like conjugating enzyme, is essential for its function. The ATG12-ATG5 conjugate acts as an E3-like enzyme which is required for lipidation of ATG8 family proteins and their association to the vesicle membranes.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG200886