

Product datasheet for **RN205679**

Atg12 (NM_001038495) Rat Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Atg12 (NM_001038495) Rat Untagged Clone
Tag: Tag Free
Symbol: Atg12
Synonyms: Apg12l
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >RN205679 representing NM_001038495
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCAGAAGACCCAGAGGCTGTGCTGCAGCTCCCCGCGGCTCCGGCTGCTGCGGCGGGCGAGAGCCTTT
TGGAGCTCTCCCCAGAAACAGCCATCCCAGAGCCCCGCTTCGTTGCAGTTTCGCCCGGTACGGAGGA
ACCTCCCGGAGACACCAAGAAAAAATTGACATCCTGCTGAAGGCTGTAGGAGACTCCATAATGAAA
ACGAAGAAATGGGCTGTGGAGCGGACCCGACTGTCCAAGCACTCATCGACTTCATCAGAAAATTCCTCA
GACTGCTGGCCTCGGAGCAGTTGTTATTTATGTGAATCAGTCCTTTGCCCTTCCCAGACCAAGAAGT
TGGGACTCTATATGAGTGTGGCAGTGATGGTAAACTGGTCTACATTACTGCAAATCACAGGCATGG
GGATGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_001038495
Insert Size: 426 bp
OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).



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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">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:	<u>NM_001038495.1</u> , <u>NP_001033584.1</u>
RefSeq Size:	2590 bp
RefSeq ORF:	426 bp
Locus ID:	361321
UniProt ID:	<u>Q2TBJ5</u>
Cytogenetics:	18q11
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. The ATG12-ATG5 conjugate also regulates negatively the innate antiviral immune response by blocking the type I IFN production pathway through direct association with RARRES3 and MAVS. Plays also a role in translation or delivery of incoming viral RNA to the translation apparatus (By similarity). [UniProtKB/Swiss-Prot Function]