

Product datasheet for **RN207011**

Atg14 (NM_001107258) Rat Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Atg14 (NM_001107258) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Atg14
Synonyms:	Atg14L; RGD1304610
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

Fully Sequenced ORF: >RN207011 representing NM_001107258
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCGTCTCCAGTGGGAAGGGTCTTGGACGCCGAGGCTCCTGGCTTGGGCCGCGGGCTCTAGCAC
CGGACCTGGTGGACTCGGTGGACGACGCCGAGGGCCTTTACGTGGCTGTTGAGCGGTGTCTCTGTGCAA
CACCACCTCGCCGCGGTTGACTTGCGCTAAGTGCCTCCAGAGCGGTGATTTCTGCTATTTTCGACGGCCGC
GACCGGGAGAGGTTTATTGACAAGAAGGAAAGGCTTAGTCAACTGAAGAACAACAAGAAGAAATTTCAA
AAGAAGTACTAAAGGCCATGGAAGGAAAACGGCTAACAGATCAGTTGCGATGGAAAATAATGTCCTGCAA
GATGAGGATTGAACAGCTGAAGCAAACGATATGTAAGGAAATGAGGAAATGAAGAAAAATTTCTGAAGGC
CTCCTCAAGAACAAGGAAAAGAACCAGAAGCTTTACAGCCGAGCGCAGCGACACCAAGAGAAAAAGGAGA
AGATTCAGCGGCACAACCGCAAGCTTGGGGACCTGGTGGAGAAGAAAACAGTGACCTGAGGGAACACTA
CGATCGGTTGGCGTGTGGCGGAGTTACACATCCTAGAGCTCACCTCTGTCATCTTCCCAATGGATGAA
GTGAAGACTTCTGGGAGGACCTGCAGACGTGTCTCAGAGACTGACAGTGCCATGACCTCCAGCATGG
TGAGCAAATCTGCTGAGGCCGAGGACGACATACCTCTCCGGAAGATGGGTCTGTGACGACCACACCGG
CGACACCAGCATTAGCATCACGGGCCCTTGGATCAGCCTGCCGAACAATGGGGACTACTCTGCTTACTAT
AACTGGGTAGAAGAGAAGAAAACAACCCAAGGACCTGACATGGAGCATAACAACCTGCCTACACCATCA
GCGCCGCGCTCGGCTATGCCACGCAGCTGGTCAACATTGTGTCTCACATCCTTGACATCAACCTTCCCAA
AAAGCTGTGCAACAGTGAGTTCTGTGGAGAAAACCTCAGCAAGCAGAGGCTGACCCGCGCAGTGAGGAAA
CTGAACGCAAACATCCTTTACCTTTGTTCTTCTCAGCATGTTAATTTAGATCAGTTGCAACCCCTGCACA
GACTGAGGAACCTGATGCATCTGGTCAGCCCGCACTCCGAGCACCTGGGCAGGTCAGGACCTTTTGAAGT
GCGAGCAGACCTCGAGGAGTCCATGGAATTTGTGGACCCTGGAGTTGCTGGGGAATCAGATGTGAGTGGA
GATGAGCGTGTGAGCGATGAGGAGACTGACCTGGGCACAGACTGGGAGAACCTGCCAAGCCACGATTCT
GTGACATCCCTTCCAGCCGGTGAAGTTTCCAGAGCCAGAGCACCCAGGCGTCCCTCCCATAGCCAG
CAGCAGCGCTGGTGGATGATCTCCTCTGCTGCGCCCTCAGTGACCTCCTGGTTCAAAGCTTACACTGGA
CACCGTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_001107258

Insert Size: 1479 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).

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_001107258.1](#), [NP_001100728.1](#)

RefSeq Size: 3409 bp

RefSeq ORF: 1479 bp

Locus ID: 305831

UniProt ID: [D4A4K3](#)

Cytogenetics: 15p14

Gene Summary: Required for both basal and inducible autophagy. Determines the localization of the autophagy-specific PI3-kinase complex. Plays a role in autophagosome formation and MAP1LC3/LC3 conjugation to phosphatidylethanolamine. Promotes BECN1 translocation from the trans-Golgi network to autophagosomes. Enhances PIK3C3 activity in a BECN1-dependent manner. Essential for the autophagy-dependent phosphorylation of BECN1. Stimulates the phosphorylation of BECN1, but suppresses the phosphorylation PIK3C3 by AMPK. Binds to STX17-SNAP29 binary t-SNARE complex on autophagosomes and primes it for VAMP8 interaction to promote autophagosome-endolysosome fusion. Modulates the hepatic lipid metabolism (By similarity).[UniProtKB/Swiss-Prot Function]