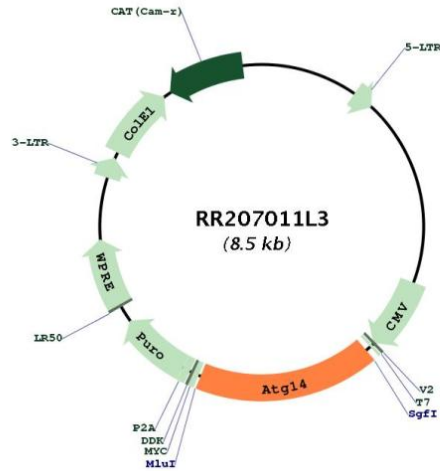


Plasmid Map:


ACCN: NM_001107258

ORF Size: 1476 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_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]