

ATG14L Antibody

Purified Mouse Monoclonal Antibody

Catalog # AO2189a

Product Information

Application	WB, IHC, E
Primary Accession	Q6ZNE5
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	1F7C10
Isotype	IgG1
Calculated MW	55309
Description	ATG14 (Autophagy Related 14) is a Protein Coding gene. Diseases associated with ATG14 include human granulocytic anaplasmosis. Among its related pathways are Senescence and Autophagy and Regulation of autophagy.
Immunogen	Purified recombinant fragment of human ATG14L (AA: 43-303) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	22863
Other Names	Beclin 1-associated autophagy-related key regulator, Barkor, Autophagy-related protein 14-like protein, Atg14L, ATG14, KIAA0831
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ATG14L Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ATG14 {ECO:0000303 PubMed:18843052}
Function	Required for both basal and inducible autophagy. Determines the localization of the autophagy-specific PI3-kinase complex PI3KC3-C1 (PubMed: 18843052 , PubMed: 19050071). Plays a role in autophagosome formation and MAP1LC3/LC3 conjugation to phosphatidylethanolamine

(PubMed:[19270696](#), PubMed:[20713597](#)). Promotes BECN1 translocation from the trans-Golgi network to autophagosomes (PubMed:[20713597](#)). Enhances PIK3C3 activity in a BECN1-dependent manner. Essential for the autophagy-dependent phosphorylation of BECN1 (PubMed:[23878393](#)). Stimulates the phosphorylation of BECN1, but suppresses the phosphorylation PIK3C3 by AMPK (PubMed:[23878393](#)). Binds to STX17-SNAP29 binary t-SNARE complex on autophagosomes and primes it for VAMP8 interaction to promote autophagosome-endolysosome fusion (PubMed:[25686604](#), PubMed:[37632749](#)). Modulates the hepatic lipid metabolism (By similarity).

Cellular Location

Cytoplasm. Endoplasmic reticulum membrane; Peripheral membrane protein. Preautophagosomal structure membrane; Peripheral membrane protein. Cytoplasmic vesicle, autophagosome membrane; Peripheral membrane protein. Note=Cytosolic under nutrient-rich conditions (PubMed:19050071). Following autophagy stimuli, such as starvation or rapamycin induction, predominantly detected in cytoplasmic foci, identified as isolation membranes and autophagosomes (PubMed:19050071). Accumulates on highly curved PtdIns(3)P enriched autophagic membrane via its BATS domain to sense and maintain membrane curvature (By similarity). Also localizes to discrete punctae along the ciliary axoneme and to the base of the ciliary axoneme (By similarity). {ECO:0000250|UniProtKB:Q8CDJ3}

References

1.Mol Cell Biol. 2013 Sep;33(18):3675-88. 2.J Biol Chem. 2012 Nov 9;287(46):39107-14.

Images

