10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# 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

