

ATG9B Antibody

Catalog # ASC11144

Specification

ATG9B Antibody - Product Information

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype
Application Notes

WB, IF, ICC, E
Q674R7
NP_775952, 239582720
Human, Mouse, Rat
Rabbit
Polyclonal
IgG
ATG9B antibody can be used for detection
of ATG9B by Western blot at 1 - 2 µg/mL.
Antibody can also be used for
immunocytochemistry starting at 10
µg/mL. For immunofluorescence start at 20

ATG9B Antibody - Additional Information

Gene ID Target/Specificity ATG9B: 285973

μg/mL.

Reconstitution & Storage

ATG9B antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

ATG9B Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ATG9B Antibody - Protein Information

Name ATG9B

Function

Phospholipid scramblase involved in autophagy by mediating autophagosomal membrane expansion. Cycles between the preautophagosomal structure/phagophore assembly site (PAS) and the cytoplasmic vesicle pool and supplies membrane for the growing autophagosome. Lipid scramblase activity plays a key role in preautophagosomal structure/phagophore assembly by distributing the phospholipids that arrive through ATG2 (ATG2A or ATG2B) from the cytoplasmic to the luminal leaflet of the bilayer, thereby driving autophagosomal membrane expansion (By similarity). In addition to autophagy, also plays a role in necrotic cell death (By similarity).

Cellular Location

Preautophagosomal structure membrane; Multi-pass membrane protein. Note=Under amino acid



starvation or rapamycin treatment, redistributes from a juxtanuclear clustered pool to a dispersed peripheral cytosolic pool (PubMed:18936157). The starvation-induced redistribution depends on ULK1 and ATG13 (PubMed:18936157).

Tissue Location

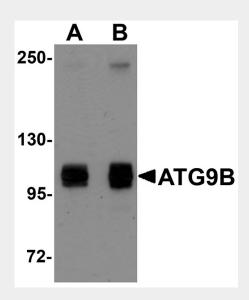
Highly expressed in placenta (trophoblast cells) and pituitary gland. Not expressed in vascular endothelial

ATG9B Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

ATG9B Antibody - Images

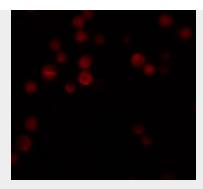


Western blot analysis of ATG9B in HeLa cell lysate with ATG9B antibody at (A) 1 and (B) 2 μg/mL.



Immunocytochemistry of ATG9B in HeLa cells with ATG9B antibody at 10 μg/mL.





Immunofluorescence of ATG9B in Hela cells with ATG9B antibody at 20 µg/mL.

ATG9B Antibody - Background

ATG9B Antibody: Autophagy, the process of bulk degradation of cellular proteins through an autophagosomic-lysosomal pathway is important for normal growth control and may be defective in tumor cells. It is involved in the preservation of cellular nutrients under starvation conditions as well as the normal turnover of cytosolic components. This process is negatively regulated by TOR (Target of rapamycin) through phosphorylation of autophagy protein APG1. ATG9B plays a role in autophagy and it's highly expressed in placenta and pituitary gland.

ATG9B Antibody - References

Gozuacik D and Kimchi A. Autophagy as a cell death and tumor suppressor mechanism. Oncogene 2004; 23:2891-906.

Kisen GO, Tessitore L, Costelli P, et al. Reduced autophagic activity in primary rat hepatocellular carcinoma and ascites hepatoma cells. Carcinogenesis1993; 14:2501-5.

Kamada Y, Funakoshi T, Shintani T, et al. Tor-mediated induction of autophagy via Apg1 protein kinase complex. J. Cell. Biol.2000; 150:1507-13.

Yamada Y, Suzuki NN, Hanada T, et al. The crystal structure of Atg3, an autophagy-related ubiquitin carrier protein (E2) enzyme that mediates Atg8 lipidation. J. Biol. Chem.2007; 282:8036-43.