

**ATG9B Antibody**  
Catalog # ASC11144

**Specification**

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**ATG9B Antibody - Product Information**

Application	WB, ICC, IF
Primary Accession	<a href="#">Q674R7</a>
Other Accession	<a href="#">NP_775952</a> , <a href="#">239582720</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	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 µg/mL.

**ATG9B Antibody - Additional Information**

Gene ID	285973
Target/Specificity	ATG9B;

**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 juxtannuclear clustered pool to a dispersed peripheral cytosolic pool (PubMed:18936157). The starvation-induced redistribution depends on ULK1 and ATG13 (PubMed:18936157).

#### Tissue Location

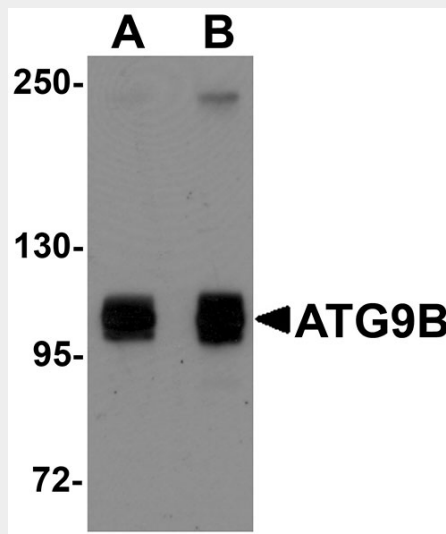
Highly expressed in placenta (trophoblast cells) and pituitary gland. Not expressed in vascular endothelial

#### ATG9B Antibody - Protocols

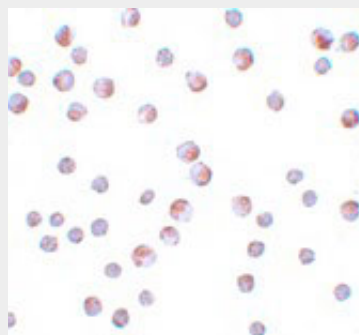
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

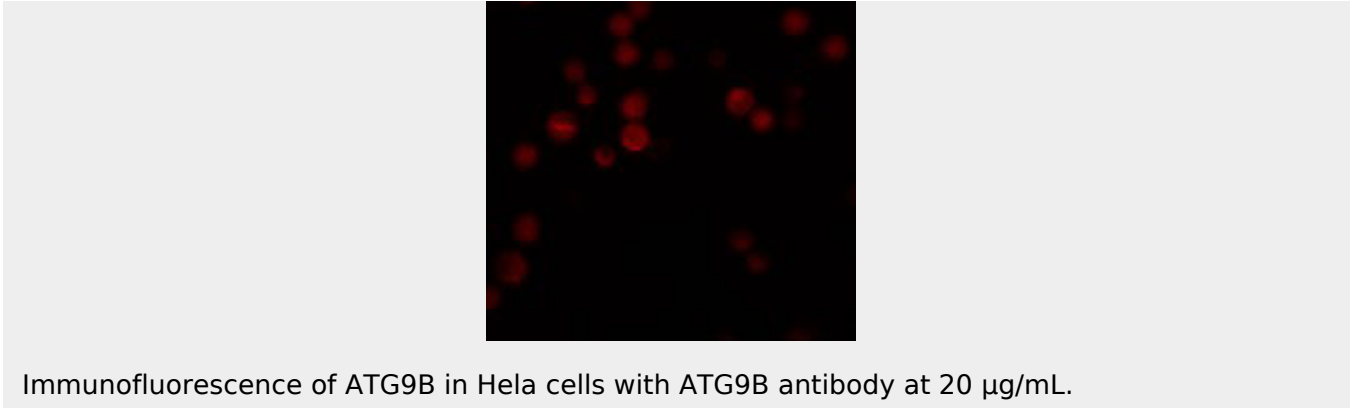
#### ATG9B Antibody - Images



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. *Carcinogenesis*1993; 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.