

### **ATG9A Antibody**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1814i

## **Specification**

#### **ATG9A Antibody - Product Information**

Application	WB, IHC-P,E
Primary Accession	<u>Q7Z3C6</u>
Other Accession	<u>Q5FWU3, Q3T904</u>
Reactivity	Human
Predicted	Bovine, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
Calculated MW	94447
Antigen Region	723-753

#### ATG9A Antibody - Additional Information

#### Gene ID 79065

Other Names Autophagy-related protein 9A, APG9-like 1, mATG9, ATG9A, APG9L1

### Target/Specificity

This ATG9A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 723~753 amino acids surrounding S738 of human APG9L1.

### Dilution

WB~~1:1000 IHC-P~~1:10~50

### Format

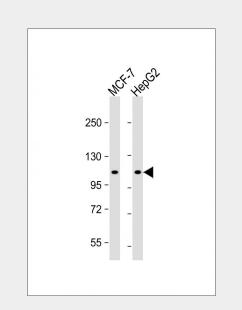
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

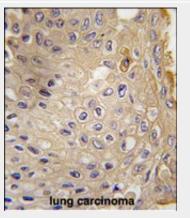
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### Precautions

ATG9A Antibody is for research use only and not for use in diagnostic or therapeutic



All lanes : Anti-APG9L1 Antibody (S738) at 1:1000 dilution Lane 1: MCF-7 whole cell lysate Lane 2: HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 94kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with APG9L1 Antibody (S738) (Cat.#AP1814i), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry;



procedures.

**ATG9A Antibody - Protein Information** 

### Name ATG9A

Synonyms APG9L1

#### Function

Involved in autophagy and cytoplasm to vacuole transport (Cvt) vesicle formation. Plays a key role in the organization of the preautophagosomal structure/phagophore assembly site (PAS), the nucleating site for formation of the sequestering vesicle. Cycles between a juxta-nuclear trans-Golgi network compartment and late endosomes. Nutrient starvation induces accumulation on autophagosomes. Starvation-dependent trafficking requires ULK1, ATG13 and SUPT20H.

### **Cellular Location**

Cytoplasmic vesicle, autophagosome membrane; Multi-pass membrane protein. Golgi apparatus, trans-Golgi network membrane; Multi-pass membrane protein Late endosome membrane; Multi-pass membrane protein. Endoplasmic reticulum 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. The starvation-induced redistribution depends on ULK1, ATG13, as well as SH3GLB1

clinical relevance has not been evaluated.

# **ATG9A Antibody - Background**

Apg9 plays a direct role in the formation of the cytoplasm to vacuole targeting and autophagic vesicles, possibly serving as a marker for a specialized compartment essential for these vesicle-mediated alternative targeting pathways.

Macroautophagy is the major inducible pathway for the general turnover of cytoplasmic constituents in eukaryotic cells, it is also responsible for the degradation of active cytoplasmic enzymes and organelles during nutrient starvation. Macroautophagy involves the formation of double-membrane bound autophagosomes which enclose the cytoplasmic constituent targeted for degradation in a membrane bound structure, which then fuse with the lysosome (or vacuole) releasing a single-membrane bound autophagic bodies which are then degraded within the lysosome (or vacuole).

## **ATG9A Antibody - References**

Baehrecke EH. Nat Rev Mol Cell Biol. 6(6):505-10. (2005) Lum JJ, et al. Nat Rev Mol Cell Biol. 6(6):439-48. (2005) Greenberg JT. Dev Cell. 8(6):799-801. (2005) Levine B. Cell. 120(2):159-62. (2005) Shintani T and Klionsky DJ. Science. 306(5698):990-5. (2004)

# **ATG9A Antibody - Protocols**

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

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