



## Rabbit Anti-ATG9A antibody

SL4010R

<b>Product Name:</b>	ATG9A
<b>Chinese Name:</b>	自噬相关蛋白9A抗体
<b>Alias:</b>	APG9 autophagy 9-like 1; APG9 like 1; APG9-like 1; APG9L1; ATG9; ATG9 autophagy related 9 homolog A; ATG9 autophagy related 9 homolog A (S. cerevisiae); ATG9A; ATG9A_HUMAN; Autophagy 9-like 1 protein; Autophagy related protein 9A; Autophagy-related protein 9A; mATG9; MGD3208; OTTHUMP00000206046; OTTHUMP00000206048; OTTHUMP00000206049; OTTHUMP00000206062.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Dog,Pig,Cow,Rabbit,
<b>Applications:</b>	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	94kDa
<b>Cellular localization:</b>	cytoplasmicThe cell membrane
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human ATG9A:301-400/839
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	Autophagy is a catabolic process for the autophagosomic-lysosomal degradation of bulk cytoplasmic contents (1,2). It is generally activated by conditions of nutrient deprivation but is also associated with a number of physiological processes including

development, differentiation, neurodegeneration, infection, and cancer (3). The molecular machinery of autophagy was largely discovered in yeast and is directed by a number of autophagy-related (Atg) genes (4). Atg9, one of the Atg proteins identified in yeast, is essential for autophagosome formation (5). There are two human functional orthologues based on the yeast homolog Atg9p: Atg9A, which has also been identified as Atg9L1 and mAtg9, and Atg9L2, which was first reported as nitric-oxide synthase 3 antisense (NOS3AS) (6,7). Atg9A is an integral membrane protein that is required for both the initiation and the expansion of the autophagosome (6,7). Recruitment of Atg9A to the autophagosomal membrane is dynamic and transient as Atg9A also cycles between autophagy-related structures known as omegasomes, the trans-Golgi network (TGN), and endosomes, and at no point becomes a stable component of the autophagosomal membrane (6,8). The precise regulation of Atg9A trafficking is not fully clarified, yet it is suggested to involve p38 mitogen-activated protein kinase (MAPK)-binding protein p38IP and the Beclin-1-binding protein Bif-1 (9,10).

**Function:**

Plays a role in autophagy. 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 FAM48A.

**Subunit:**

Belongs to the ATG9 family.

**Subcellular Location:**

Cytoplasmic vesicle > autophagosome membrane. Golgi apparatus > trans-Golgi network membrane. Late endosome membrane.

**Similarity:**

Belongs to the ATG9 family.

**SWISS:**

Q7Z3C6

**Gene ID:**

79065

**Database links:**

[Entrez Gene: 79065](#)Human

[Entrez Gene: 245860](#)Mouse

[Entrez Gene: 363254](#)Rat

[Omim: 612204](#)Human

[SwissProt: Q7Z3C6](#)Human

[SwissProt: Q68FE2](#)Mouse

[SwissProt: Q5FWU3](#)Rat

[Unigene: 323363](#)Human

[Unigene: 479951](#)Mouse

[Unigene: 35248](#)Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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