

## Basic Information

<b>Product Name</b>	Anti-ATG9A Antibody	
<b>Gene Name</b>	ATG9A	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Polyclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human, mouse, rat	
<b>Tested Application</b>	WB, IHC, FCM, ELISA	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	E.coli-derived human ATG9A recombinant protein (Position: E22-R169).	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	100-110 kDa	
<b>Dilution Ratios</b>	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Flow Cytometry (Fixed):	1:50-200
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000
	(Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

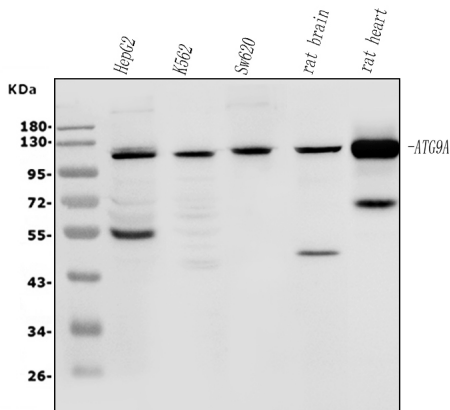
## Storage

12 months from date of receipt, -20°C as supplied.

## Background Information

Autophagy-related protein 9A is a protein that in humans is encoded by the ATG9A gene. ATG9A is the only transmembrane ATG protein essential for autophagy. It plays a key role in the organization of the preautophagosomal structure/phagophore assembly site (PAS). It has been reported that ATG9A expression is increased in oral squamous cell carcinoma and breast cancers. The inhibition of ATG9A can lead to an inhibition of cancer cell proliferation and invasion.

## Selected Validation Data



Western blot analysis of ATG9A using anti-ATG9A antibody

(A03757-3). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HEPG2 whole cell lysates,

Lane 2: human K562 whole cell lysates,

Lane 3: human SW620 whole cell lysates,

Lane 4: rat brain tissue lysates,

Lane 5: rat heart tissue lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-ATG9A antigen

affinity purified polyclonal antibody (A03757-3) at a dilution of

1:1000 and probed with a goat anti-rabbit IgG-HRP secondary

antibody (Catalog # BA1054). The signal is developed using ECL Plus

Western Blotting Substrate (Catalog # AR1197). A specific band was

detected for ATG9A at approximately 100-110 kDa. The expected

band size for ATG9A is at 94 kDa.



IHC analysis of ATG9A using anti-ATG9A antibody (A03757-3).

ATG9A was detected in a paraffin-embedded section of human

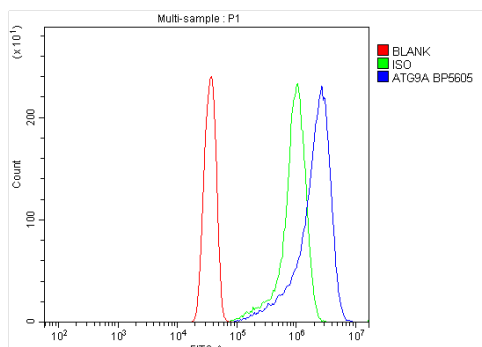
glioma tissue. Biotinylated goat anti-rabbit IgG was used as

secondary antibody. The tissue section was incubated with rabbit

anti-ATG9A Antibody (A03757-3) at a dilution of 1:200 and

developed using Streptavidin-Biotin-Complex (SABC) (Catalog #

SA1022) with DAB (Catalog # AR1027) as the chromogen.



Flow Cytometry analysis of HeLa cells using anti-ATG9A antibody (A03757-3).

Overlay histogram showing HeLa cells stained with A03757-3 (Blue line).

To facilitate intracellular staining, cells were fixed with 4%

paraformaldehyde and permeabilized with permeabilization buffer.

The cells were blocked with 10% normal goat serum. And then

incubated with rabbit anti-ATG9A Antibody (A03757-3) at 1:100

dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit

IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.