

Basic Information

Product Name	Anti-ATG9A Antibody		
Gene Name	ATG9A		
Source	Rabbit		
Clonality	Polyclonal		
Isotype	IgG		
Species Reactivity	human, mouse		
Tested Application	WB, ICC/IF, FCM, ELISA		
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.		
Immunogen	E.coli-derived human ATG9A recombinant protein (Position: M1-D812).		
Concentration	500 ug/ml		
Purification	Immunogen affinity purified.		
Observed MW	100-110 kDa		
Dilution Ratios	Western blot (WB):	1:500-2000	
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400	
	Flow Cytometry (Fixed):	1:50-200	
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000	

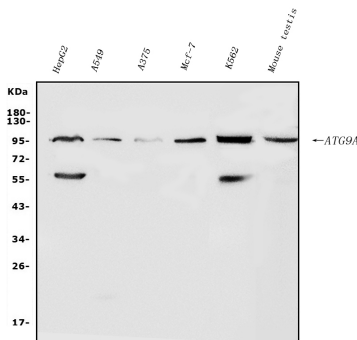
Storage

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

(A03757-2). 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 A549 whole cell lysates,

Lane 3: Human A375 whole cell lysates,

Lane 4: Human MCF-7 whole cell lysates,

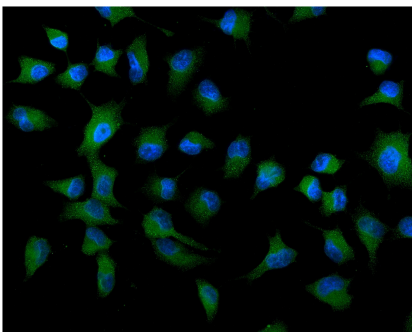
Lane 5: Human K562 whole cell lysates,

Lane 6: Mouse testis tissue lysates.

After electrophoresis, proteins were transferred to a membrane.

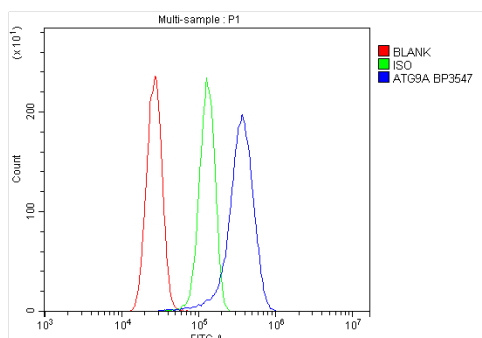
Then the membrane was incubated with rabbit anti-ATG9A antigen affinity purified polyclonal antibody (A03757-2) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for ATG9A at approximately 100-110 kDa. The expected band size for ATG9A is at 94 kDa.

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ICC/IF analysis of ATG9A using anti-ATG9A antibody (A03757-2).

ATG9A was detected in an immunocytochemical section of A549 cells. The section was incubated with rabbit anti-ATG9A Antibody (A03757-2) at a dilution of 1:100. Fluoro488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of U87 cells using anti-ATG9A antibody (A03757-2).

Overlay histogram showing U87 cells stained with A03757-2 (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 (A03757-2) 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.