

## Basic Information

<b>Product Name</b>	Anti-ATG4A Antibody	
<b>Gene Name</b>	ATG4A	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Polyclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human, mouse, rat	
<b>Tested Application</b>	WB, 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 ATG4A recombinant protein (Position: M1-V398).	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	45 kDa	
<b>Dilution Ratios</b>	Western blot (WB):	1:500-2000
	Flow Cytometry (Fixed):	1:50-200
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000

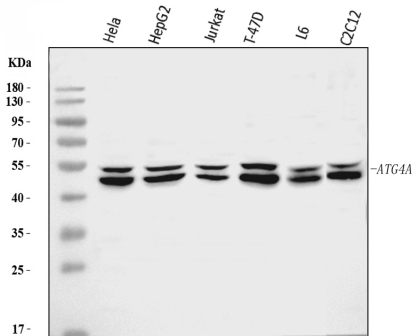
## Storage

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

## Background Information

Cysteine protease ATG4A is an enzyme that in humans is encoded by the ATG4A gene. It is mapped to Xq22.3. Autophagy is the process by which endogenous proteins and damaged organelles are destroyed intracellularly. Autophagy is postulated to be essential for cell homeostasis and cell remodeling during differentiation, metamorphosis, non-apoptotic cell death, and aging. Reduced levels of autophagy have been described in some malignant tumors, and a role for autophagy in controlling the unregulated cell growth linked to cancer has been proposed. This gene encodes a member of the autophagin protein family. The encoded protein is also designated as a member of the C-54 family of cysteine proteases.

## Selected Validation Data



Western blot analysis of ATG4A using anti-ATG4A antibody

(A06539-3). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: HELA whole cell lysates,

Lane 2: HEPG2 whole cell lysates,

Lane 3: Jurkat whole cell lysates,

Lane 4: t-47d whole cell lysates,

Lane 5: L6 whole cell lysates,

Lane 6: C2C12 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-ATG4A antigen

affinity purified polyclonal antibody (A06539-3) at a dilution of

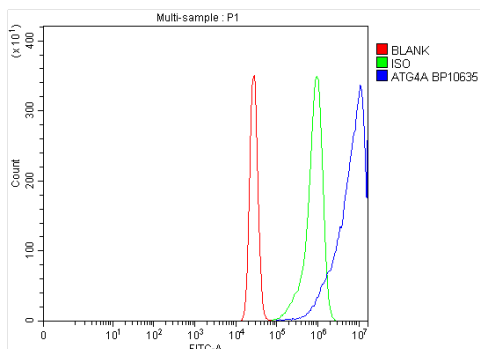
1:1000 and probed with a goat anti-rabbit IgG-HRP secondary

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

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

detected for ATG4A at approximately 45 kDa. The expected band

size for ATG4A is at 45 kDa.



Flow Cytometry analysis of K562 cells using anti-ATG4A antibody (A06539-3).

Overlay histogram showing K562 cells stained with A06539-3 (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-ATG4A Antibody (A06539-3) 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.