

Basic Information

Product Name	Anti-ATG7 Antibody	
Gene Name	ATG7	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, FCM, IHC	
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human ATG7, identical to the related mouse and rat sequences.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	78 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Flow Cytometry (Fixed): 1:50-200 (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.

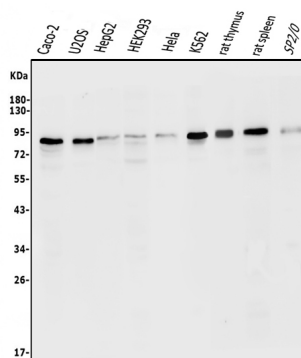
Background Information

Autophagy related 7 is a protein in humans encoded by ATG7 gene. It is mapped to 3p25.3. This gene encodes an E1-like activating enzyme that is essential for autophagy and cytoplasmic to vacuole transport. The encoded protein is also thought to modulate p53-dependent cell cycle pathways during prolonged metabolic stress. It has been associated with multiple functions, including axon membrane trafficking, axonal homeostasis, mitophagy, adipose differentiation, and hematopoietic stem cell maintenance. Alternative splicing results in multiple transcript variants.

Reference

Anti-ATG7 Antibody被引用在5文献中。

Selected Validation Data



Western blot analysis of ATG7 using anti-ATG7 antibody (A00346). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human CACO-2 whole cell lysates,

Lane 2: human U2OS whole cell lysates,

Lane 3: human HepG2 whole cell lysates,

Lane 4: human HEK293 whole cell lysates,

Lane 5: human HELA whole cell lysates,

Lane 6: human K562 whole cell lysates,

Lane 7: Rat thymus tissue lysates,

Lane 8: Rat spleen tissue lysates,

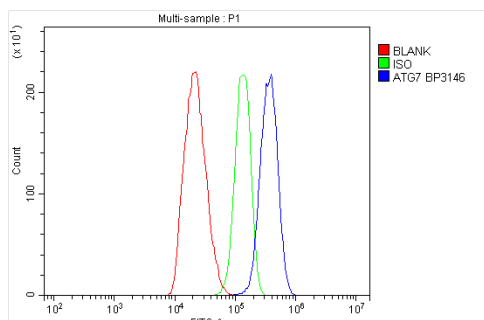
Lane 9: Mouse SP2/0 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-ATG7 antigen

affinity purified polyclonal antibody (A00346) 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 ATG7 at approximately 78 kDa. The expected band size for ATG7 is at 78 kDa.



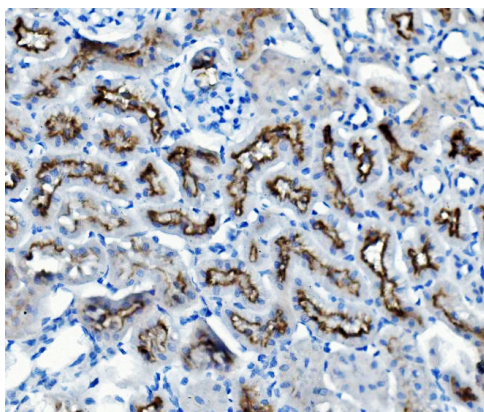
Flow Cytometry analysis of C6 cells using anti-ATG7 antibody (A00346).

Overlay histogram showing C6 cells stained with A00346 (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-ATG7 Antibody (A00346) 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.



IHC analysis of ATG7 using anti-ATG7 antibody (A00346).

ATG7 was detected in a paraffin-embedded section of mouse kidney tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-ATG7 Antibody (A00346) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.