

Basic Information

Product Name	Anti-ATG12 Antibody	
Gene Name	ATG12	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human	
Tested Application	WB, 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 ATG12 recombinant protein (Position: M68-Q99).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	45-50 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Flow Cytometry (Fixed):	1:50-200
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000

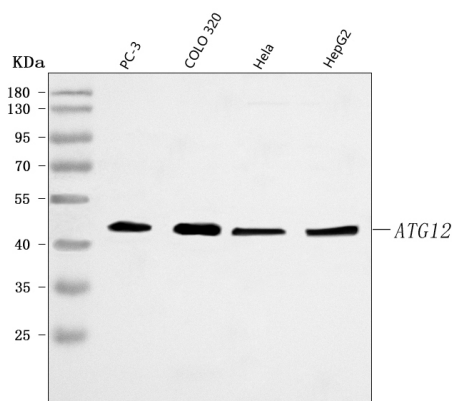
Storage

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

Background Information

Autophagy related 12 is a protein that in humans is encoded by the ATG12 gene. Autophagy is a process of bulk protein degradation in which cytoplasmic components, including organelles, are enclosed in double-membrane structures called autophagosomes and delivered to lysosomes or vacuoles for degradation. ATG12 is the human homolog of a yeast protein involved in autophagy.

Selected Validation Data



Western blot analysis of anti-ATG12 antibody (A00820-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

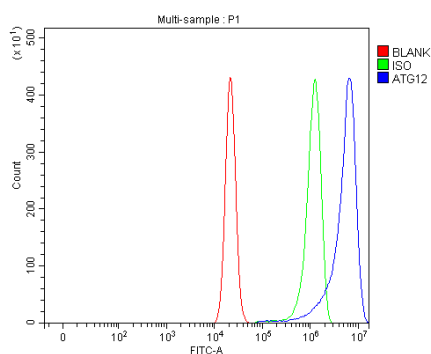
Lane 1: human PC-3 whole cell lysates,

Lane 2: human COLO 320 whole cell lysates,

Lane 3: human HeLa whole cell lysates,

Lane 4: human HepG2 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-ATG12 antigen affinity purified polyclonal antibody (A00820-2) 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 ATG12 at approximately 48 kDa. The expected band size for ATG12 is at 15 kDa.



Flow Cytometry analysis of RT4 cells using anti-ATG12 antibody (A00820-2).

Overlay histogram showing RT4 cells stained with A00820-2 (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-ATG12 Antibody (A00820-2) 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.