

Basic Information

Product Name	Anti-ATG14 Antibody	
Gene Name	ATG14	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, rat	
Tested Application	WB, IHC, ICC/IF, IF, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human ATG14L, different from the related mouse and rat sequences by two amino acids.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	59 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunofluorescence (IF):	1:50-400
	Immunocytochemistry/Immunofluorescence (ICC/IF):	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

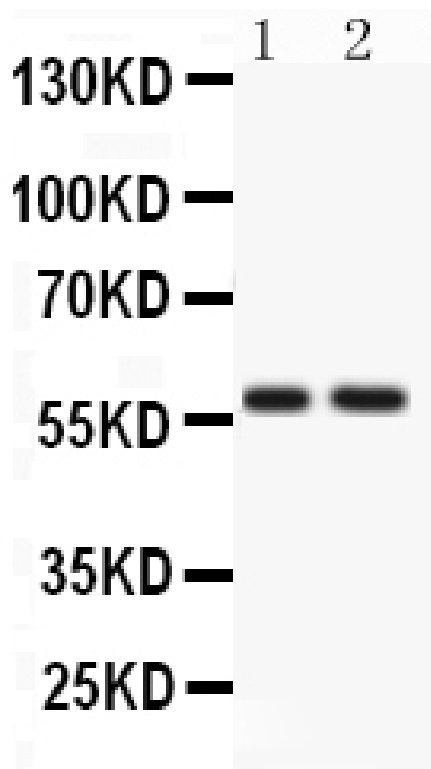
ATG14 (also known as beclin-1-associated autophagy-related key regulator (Barkor) or ATG14L), an essential autophagy-specific regulator of the class III phosphatidylinositol 3-kinase complex, promotes membrane tethering of protein-free liposomes, and enhances hemifusion and full fusion of proteoliposomes reconstituted with the target (t)-SNAREs (soluble N-ethylmaleimide-sensitive factor attachment protein receptors) syntaxin 17 (STX17) and SNAP29, and the vesicle (v)-SNARE VAMP8 (vesicle-associated membrane protein 8). ATG14 binds to the SNARE core domain of

STX17 through its coiled-coil domain, and stabilizes the STX17-SNAP29 binary t-SNARE complex on autophagosomes.

Reference

Anti-ATG14 Antibody被引用在1文献中。

Selected Validation Data



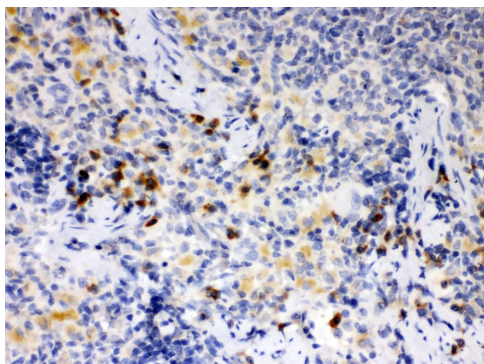
Western blot analysis of ATG14 using anti-ATG14 antibody (PB9481). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: Rat Brain tissue lysates,

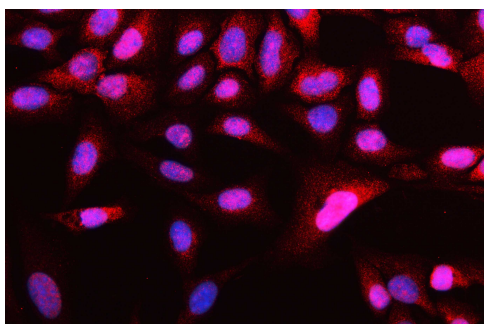
Lane 2: HELA whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

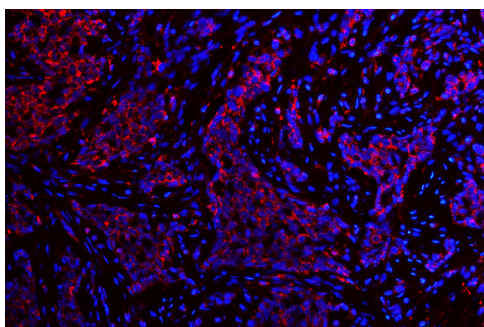
Then the membrane was incubated with rabbit anti-ATG14 antigen affinity purified polyclonal antibody (PB9481) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for ATG14 at approximately 59 kDa. The expected band size for ATG14 is at 55 kDa.



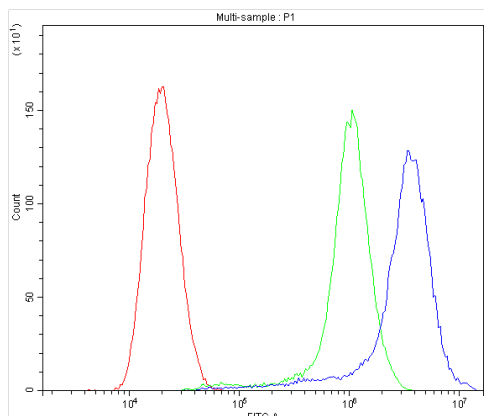
IHC analysis of ATG14 using anti-ATG14 antibody (PB9481). ATG14 was detected in a paraffin-embedded section of rat spleen tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-ATG14 Antibody (PB9481) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



ICC/IF analysis of ATG14 using anti-ATG14 antibody (PB9481). ATG14 was detected in an immunocytochemical section of U2OS cells. Cy3-conjugated Anti-rabbit IgG Secondary Antibody (red)(Catalog#BA1032) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



IF analysis of ATG14 using anti-ATG14 antibody (PB9481). ATG14 was detected in a paraffin-embedded section of human lung cancer tissue. Cy3-conjugated Anti-rabbit IgG Secondary Antibody (red)(Catalog#BA1032) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of SiHa cells using anti-ATG14 antibody (PB9481).

Overlay histogram showing SiHa cells stained with PB9481 (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-ATG14 Antibody (PB9481) 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

Product datasheet

Anti-ATG14 Antibody

Catalog Number: **PB9481**

BOSTER[®]

antibody and ELISA experts

BOSTER BIOLOGICAL TECHNOLOGY

Building C21, 3rd to 5th Floors, Optics Valley Biopharmaceutical Accelerator,
East Lake High-Tech Development Zone, Wuhan.

Web: www.boster.com **Phone:** 027-67845390/1/2 **Email:** boster@boster.com

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.