

Basic Information

Product Name	Anti-Beclin 1/BECN1 Antibody	
Gene Name	BECN1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, ICC/IF, IP, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human Beclin 1 recombinant protein (Position: M1-S354). Human Beclin 1 shares 97% amino acid (aa) sequence identity with both mouse and rat Beclin 1.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	60 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	ImmunoPrecipitation (IP):	1:250-300
	Flow Cytometry (Fixed):	1:50-200

Storage

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

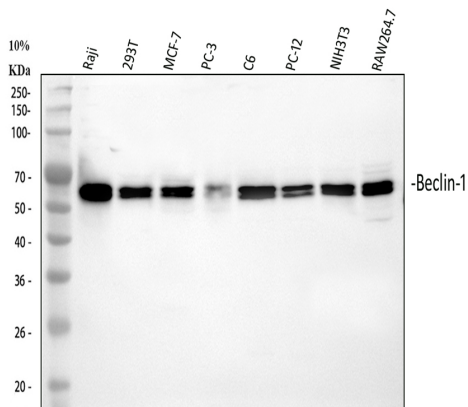
Background Information

Beclin-1, also known as ATG6 or VPS30 is a protein that in humans is encoded by the BECN1 gene. Beclin-1 and its binding partner class III phosphoinositide 3-kinase (PI3K), also named Vps34, are required for the initiation of the formation of the autophagosome in autophagy. This gene participates in the regulation of autophagy and has an important role in development, tumorigenesis, and neurodegeneration. Schizophrenia is associated with low levels of Beclin-1 in the hippocampus of the affected which causes diminished autophagy which in turn results in increased neuronal cell death. It has been found that beclin-1 can promote autophagy in autophagy-defective yeast with a targeted disruption of *apg6/vps30*, and in human MCF7 breast carcinoma cells.

Reference

Anti-Beclin 1/BECN1 Antibody被引用在43文献中。

Selected Validation Data



Western blot analysis of Beclin 1/BECN1 using anti-Beclin 1/BECN1 antibody (PB9076). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Raji whole cell lysates,

Lane 2: human 293T whole cell lysates,

Lane 3: human MCF-7 whole cell lysates,

Lane 4: human PC-3 whole cell lysates,

Lane 5: rat C6 whole cell lysates,

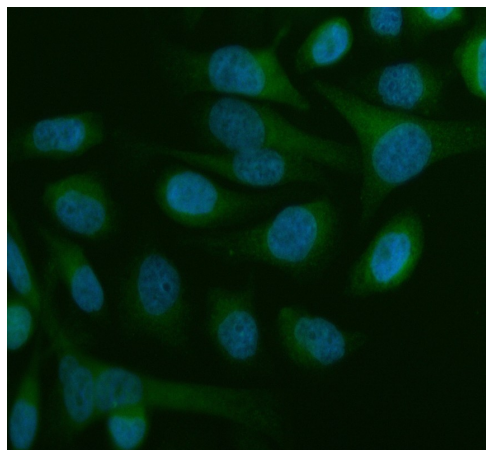
Lane 6: rat PC-12 whole cell lysates,

Lane 7: mouse NIH/3T3 whole cell lysates,

Lane 8: mouse RAW264.7 whole cell lysates.

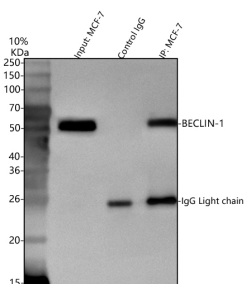
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-Beclin 1/BECN1 antigen affinity purified polyclonal antibody (PB9076) 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 Beclin 1/BECN1 at approximately 60 kDa. The expected band size for Beclin 1/BECN1 is at 52 kDa.



ICC/IF analysis of Beclin 1/BECN1 using anti-Beclin 1/BECN1 antibody (PB9076).

Beclin 1/BECN1 was detected in an immunocytochemical section of HeLa cells. The section was incubated with rabbit anti-Beclin 1/BECN1 Antibody (PB9076) 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).



IP analysis of Beclin 1/BECN1 using anti-Beclin 1/BECN1 antibody (PB9076) in MCF-7 whole cell lysate.

Western blot analysis of Beclin 1/BECN1 using anti- Beclin 1/BECN1 antibody (PB9076).

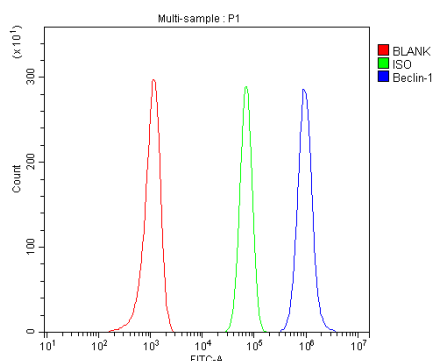
Lane 1: MCF-7 whole cell lysates(30ug),

Lane 2: Rabbit control IgG instead of anti- Beclin 1/BECN1 antibody in MCF-7 whole cell lysate,

Lane 3: anti- Beclin 1/BECN1 antibody (2μg) + MCF-7 whole cell lysate (500μg).

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti- Beclin 1/BECN1 antigen affinity purified polyclonal antibody (PB9076) 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 Beclin 1/BECN1 at approximately 60 kDa. The expected band size for Beclin 1/BECN1 is at 52 kDa.



Flow Cytometry analysis of Raji cells using anti-Beclin 1/BECN1 antibody (PB9076).

Overlay histogram showing Raji cells stained with PB9076 (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-Beclin 1/BECN1 Antibody (PB9076) 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.