

Basic Information

Product Name	Anti-Beclin 1/BECN1 Antibody (Clone#2D12A3)	
Gene Name	BECN1	
Source	Mouse	
Isotype	IgG1	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF, FCM	
Contents	500 ug/ml antibody with PBS , 0.02% NaN ₃ , 1 mg 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	protein G purified.	
Observed MW	52-60KD	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry(Paraffin-embedded Section): 1:50-400 Immunocytochemistry/Immunofluorescence(ICC/IF): 1:50-400 Flow cytometry (FCM): 1-3 µg/1x10 ⁶ cells (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. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

Beclin-1, also known as 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 autophagywhich 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.

Selected Validation Data

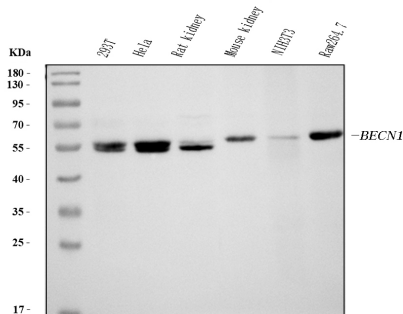


Figure 1. Western blot analysis of anti- BECN1 Antibody (M00327-2).

The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: 293T whole cell lysates,

Lane 2: HELA whole cell lysates,

Lane 3: rat kidney tissue lysates,

Lane 4: mouse kidney tissue lysates,

Lane 5: NIH/3T3 whole cell lysates,

Lane 6: RAW264.7 whole cell lysates.

Use mouse anti- BECN1 1:1000, probed with a goat anti-mouse IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001). A specific band was detected for BECN1 at approximately 52-60KD. The expected band size for BECN1 is at 52KD.