

Beclin 1 Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10500**Specification**

Beclin 1 Antibody - Product Information

Application	WB
Primary Accession	O88597
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	51589

Beclin 1 Antibody - Additional Information**Gene ID** 56208**Application & Usage**

Western blotting (0.5-2 µg/ml). However, the optimal concentrations should be determined individually. Other applications have not been tested. The antibody recognizes ~53 kDa beclin 1 in Jurkat cell lysate. A weak band of ~110 kDa (possibly dimer) can also be observed in Jurkat cells. In mouse intestine tissue lysate, the antibody recognizes a ~100 kDa band (possibly dimer). Reactivity to other species has not been tested.

Other Names

BECN1 , GT197 , Beclin-1 , beclin1 , ATG6 , VPS30

Target/Specificity

Beclin 1

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

100 µg (0.2mg/ml) protein A purified rabbit anti-Beclin 1 polyclonal antibody in phosphate-buffered saline (PBS) containing 1% BSA, 50% glycerol, and 0.02% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions

Beclin 1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Beclin 1 Antibody - Protein Information

Name Becn1

Function

Plays a central role in autophagy (PubMed:10604474, PubMed:12372286, PubMed:19270693, PubMed:28445460). Acts as a core subunit of different PI3K complex forms that mediate formation of phosphatidylinositol 3-phosphate and are believed to play a role in multiple membrane trafficking pathways: PI3KC3-C1 is involved in initiation of autophagosomes and PI3KC3-C2 in maturation of autophagosomes and endocytosis (PubMed:19270693, PubMed:25275521). Involved in regulation of degradative endocytic trafficking and required for the abscission step in cytokinesis, probably in the context of PI3KC3-C2 (By similarity). Essential for the formation of PI3KC3-C2 but not PI3KC3-C1 PI3K complex forms (PubMed:25275521). Involved in endocytosis including endosome formation in neuronal cells (PubMed:25275521). May play a role in antiviral host defense (By similarity).

Cellular Location

Cytoplasm. Golgi apparatus, trans-Golgi network membrane {ECO:0000250|UniProtKB:Q14457}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q14457}. Endosome membrane {ECO:0000250|UniProtKB:Q14457}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q14457}. Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q14457}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q14457}. Mitochondrion membrane {ECO:0000250|UniProtKB:Q14457}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q14457}. Endosome Cytoplasmic vesicle, autophagosome. Note=Interaction with ATG14 promotes translocation to autophagosomes (By similarity) Expressed in dendrites and cell bodies of cerebellar Purkinje cells Localized to endosomes in neurons (PubMed:25275521) {ECO:0000250|UniProtKB:Q14457, ECO:0000269|PubMed:12372286, ECO:0000269|PubMed:25275521} [Beclin-1-C 37 kDa]: Mitochondrion

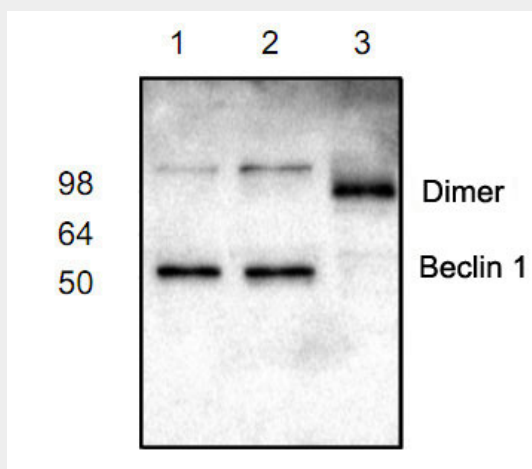
Beclin 1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)

- [Cell Culture](#)

Beclin 1 Antibody - Images



Western blot analysis of Beclin 1 expression in Jurkat (Lane 1,2) and mouse intestine (lane 3) lysates.

Beclin 1 Antibody - Background

Beclin is a Bcl-2 binding protein. Its structure includes a Bcl-2 binding coiled-coil region, and a leucine-rich nuclear export signal (NES). Beclin protein colocalizes with intracytoplasmic organelles and nuclei in normal COS7 and MCF7 cells. Beclin interaction with Bcl-2 may be involved with host viral defense, since over expression of beclin inhibits Sindbis virus replication and expression of beclin lacking the Bcl-2 binding domain has no antiviral effects.