

Beclin 1 Antibody

Rabbit Polyclonal Antibody Catalog # ABV10500

Specification

Beclin 1 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW WB <u>088597</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 51589

Beclin 1 Antibody - Additional Information

Gene ID 56208

Application & Usage

Western blotting (0.5-2 μ g/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 μ g (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:12372286, PubMed:19270693, PubMed:28445460). Acts as a core subunit of different Pl3K complex forms that mediate formation of phosphatidylinositol 3-phosphate and are believed to play a role in multiple membrane trafficking pathways: Pl3KC3-C1 is involved in initiation of autophagosomes and Pl3KC3-C2 in maturation of autophagosomes and endocytosis (PubMed:12372286, PubMed:28445460). Acts as a core subunit of different Pl3K complex forms that mediate formation of phosphatidylinositol 3-phosphate and are believed to play a role in multiple membrane trafficking pathways: Pl3KC3-C1 is involved in initiation of autophagosomes and Pl3KC3-C2 in maturation of autophagosomes and endocytosis (PubMed:19270693, PubMed:19270693, PubMed:19270693, PubMed:19270693, PubMed:10270693, PubMed:10270693, PubMed:10270693, PubMed:25275521). Involved in endocytosis including endosome formation in neuro

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.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety



• <u>Cell Culture</u> 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.