

# Beclin1-BH3 Domain Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8653a

### Specification

## **Beclin1-BH3 Domain Antibody - Product Information**

Application Primary Accession Other Accession

Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB, IHC-P, FC,E <u>Q14457</u> <u>Q6GP52</u>, <u>Q91XJ1</u>, <u>Q4A1L5</u>, <u>088597</u>, <u>O5ZKS6</u>, <u>Q4A1L4</u> Human, Mouse Bovine, Chicken, Pig, Rat, Xenopus Rabbit Polyclonal Rabbit IgG 51896 95-132

### Beclin1-BH3 Domain Antibody - Additional Information

Gene ID 8678

**Other Names** Beclin-1, Coiled-coil myosin-like BCL2-interacting protein, Protein GT197, BECN1, GT197

#### Target/Specificity

This Beclin1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 95-132 amino acids from human Beclin1.

**Dilution** WB~~1:1000 IHC-P~~1:50~100 FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

Beclin1-BH3 Domain Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Beclin1-BH3 Domain Antibody - Protein Information



# Name BECN1

Synonyms GT197

**Function** Plays a central role in autophagy (PubMed:<u>18570871</u>, PubMed:<u>21358617</u>, PubMed:<u>23184933</u>, PubMed:<u>23974797</u>, PubMed:<u>25484083</u>, PubMed:<u>28445460</u>, PubMed:<u>37776275</u>). Acts as a core subunit of the PI3K complex that mediates formation of phosphatidylinositol 3-phosphate; different complex forms 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. Involved in regulation of degradative endocytic trafficking and required for the abscission step in cytokinesis, probably in the context of PI3KC3-C2 (PubMed:<u>20208530</u>, PubMed:<u>20643123</u>, PubMed:<u>23974797</u>, PubMed:<u>26783301</u>). Essential for the formation of PI3KC3-C2 but not PI3KC3-C1 PI3K complex forms. Involved in endocytosis (PubMed:<u>25275521</u>). May play a role in antiviral host defense.

#### **Cellular Location**

Cytoplasm. Golgi apparatus, trans-Golgi network membrane; Peripheral membrane protein. Endosome membrane; Peripheral membrane protein. Endoplasmic reticulum membrane; Peripheral membrane protein. Mitochondrion membrane; Peripheral membrane protein. Endosome {ECO:0000250|UniProtKB:088597} Cytoplasmic vesicle, autophagosome. Note=Interaction with ATG14 promotes translocation to autophagosomes. Expressed in dendrites and cell bodies of cerebellar Purkinje cells (By similarity) {ECO:0000250|UniProtKB:088597, ECO:0000269|PubMed:19050071} [Beclin-1-C 37 kDa]: Mitochondrion {ECO:0000250|UniProtKB:088597}

Tissue Location Ubiquitous.

# Beclin1-BH3 Domain Antibody - Protocols

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

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

Beclin1-BH3 Domain Antibody - Images





Western blot analysis of Beclin1-BH3 Domain Antibody (Cat. #AP8653a) in mouse stomach tissue lysates (35ug/lane). BECN1 (arrow) was detected using the purified Pab.



Beclin1-BH3 Domain Antibody (Cat. #AP8653a) IHC analysis in formalin fixed and paraffin embedded mouse brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the Beclin1-BH3 Domain Antibody for immunohistochemistry. Clinical relevance has not been evaluated.



Beclin1-BH3 Domain Antibody (Cat. #AP8653a) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



# Beclin1-BH3 Domain Antibody - Background

Beclin1-BH3 plays a central role in autophagy (By similarity). It may play a role in antiviral host defense. Protects against infection by a neurovirulent strain of Sindbis virus.

### Beclin1-BH3 Domain Antibody - References

Won,K.Y., et.al., Hum. Pathol. 41 (1), 107-112 (2010) Oberstein,A., et.al., J. Biol. Chem. 282 (17), 13123-13132 (2007)