

BECN1 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1534a

Specification

BECN1 Antibody - Product Information

Application	E, WB, IHC, FC
Primary Accession	Q14457
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	60kDa KDa

Description

Beclin-1 participates in the regulation of autophagy and has an important role in development, tumorigenesis, and neurodegeneration (Zhong et al., 2009 (PubMed 19270693)).(supplied by OMIM) . Tissue specificity: Ubiquitous.

Immunogen

Purified recombinant fragment of human BECN1 expressed in E. Coli.

Formulation

Ascitic fluid containing 0.03% sodium azide.

BECN1 Antibody - Additional Information

Gene ID 8678

Other Names

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

Dilution

E~~1/10000
WB~~1/500 - 1/2000
IHC~~1/500 - 1/2000
FC~~1/200 - 1/400

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

BECN1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

BECN1 Antibody - Protein Information

Name BECN1

Synonyms GT197

Function

Plays a central role in autophagy (PubMed: [18570871](http://www.uniprot.org/citations/18570871), PubMed: [21358617](http://www.uniprot.org/citations/21358617), PubMed: [23184933](http://www.uniprot.org/citations/23184933), PubMed: [23974797](http://www.uniprot.org/citations/23974797), PubMed: [25484083](http://www.uniprot.org/citations/25484083), PubMed: [28445460](http://www.uniprot.org/citations/28445460), PubMed: [37776275](http://www.uniprot.org/citations/37776275)). 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: [20208530](http://www.uniprot.org/citations/20208530), PubMed: [20643123](http://www.uniprot.org/citations/20643123), PubMed: [23974797](http://www.uniprot.org/citations/23974797), PubMed: [26783301](http://www.uniprot.org/citations/26783301)). Essential for the formation of PI3KC3-C2 but not PI3KC3-C1 PI3K complex forms. Involved in endocytosis (PubMed: [25275521](http://www.uniprot.org/citations/25275521)). 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:O88597} 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:O88597, ECO:0000269|PubMed:19050071} [Beclin-1-C 37 kDa]: Mitochondrion {ECO:0000250|UniProtKB:O88597}

Tissue Location

Ubiquitous.

BECN1 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](#)

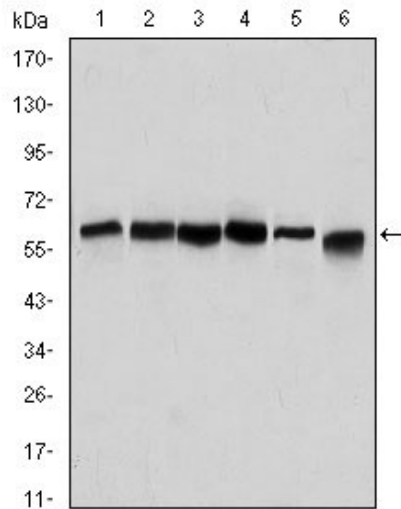
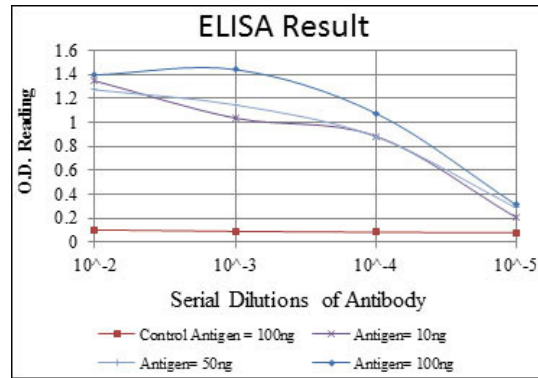


Figure 1: Western blot analysis using BECN1 mouse mAb against Hela (1), A431 (2), MCF-7 (3), RAJI (4), Jurkat (5) and SKBR-3 (6) cell lysate.

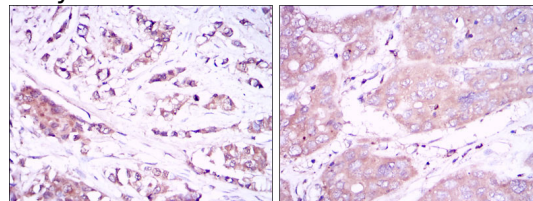


Figure 2: Immunohistochemical analysis of paraffin-embedded breast cancer tissues (left) and liver cancer tissues (right) using BECN1 mouse mAb with DAB staining.

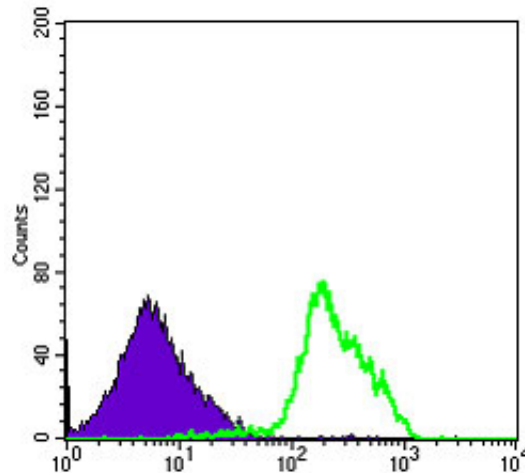


Figure 3: Flow cytometric analysis of RAJI cells using BECN1 mouse mAb (green) and negative control (purple).

BECN1 Antibody - References

1. Autophagy. 2008 Oct 1;4(7):947-8. 2. J Clin Invest. 2008 Jun;118(6):2190-9.