

**BECN1 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1534a**

**Specification**

**BECN1 Antibody - Product Information**

Application	<b>E, WB, IHC, FC</b>
Primary Accession	<a href="#">Q14457</a>
Reactivity	<b>Human</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG1</b>
Calculated MW	<b>60kDa KDa</b>

**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:<a href="http://www.uniprot.org/citations/18570871" target="\_blank">18570871</a>, PubMed:<a href="http://www.uniprot.org/citations/21358617" target="\_blank">21358617</a>, PubMed:<a href="http://www.uniprot.org/citations/23184933" target="\_blank">23184933</a>, PubMed:<a href="http://www.uniprot.org/citations/23974797" target="\_blank">23974797</a>, PubMed:<a href="http://www.uniprot.org/citations/25484083" target="\_blank">25484083</a>, PubMed:<a href="http://www.uniprot.org/citations/28445460" target="\_blank">28445460</a>, PubMed:<a href="http://www.uniprot.org/citations/37776275" target="\_blank">37776275</a>). 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:<a href="http://www.uniprot.org/citations/20208530" target="\_blank">20208530</a>, PubMed:<a href="http://www.uniprot.org/citations/20643123" target="\_blank">20643123</a>, PubMed:<a href="http://www.uniprot.org/citations/23974797" target="\_blank">23974797</a>, PubMed:<a href="http://www.uniprot.org/citations/26783301" target="\_blank">26783301</a>). Essential for the formation of PI3KC3-C2 but not PI3KC3-C1 PI3K complex forms. Involved in endocytosis (PubMed:<a href="http://www.uniprot.org/citations/25275521" target="\_blank">25275521</a>). 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](#)

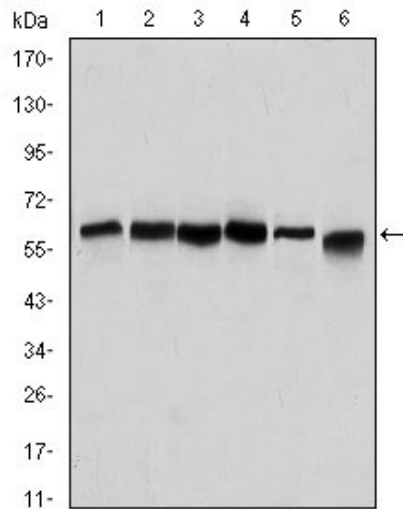
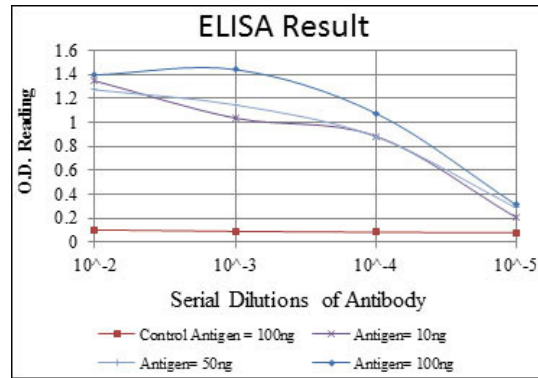


Figure 1: Western blot analysis using BECN1 mouse mAb against Hela (1), A431 (2), MCF-7 (3), RAJI (4), Jurkat (5) and SKBR-3 (6) cell lysate.

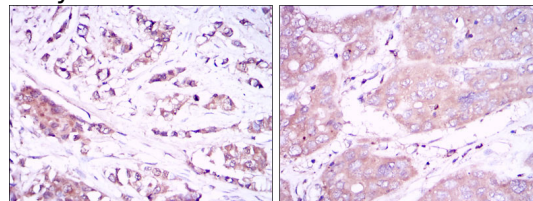


Figure 2: Immunohistochemical analysis of paraffin-embedded breast cancer tissues (left) and liver cancer tissues (right) using BECN1 mouse mAb with DAB staining.

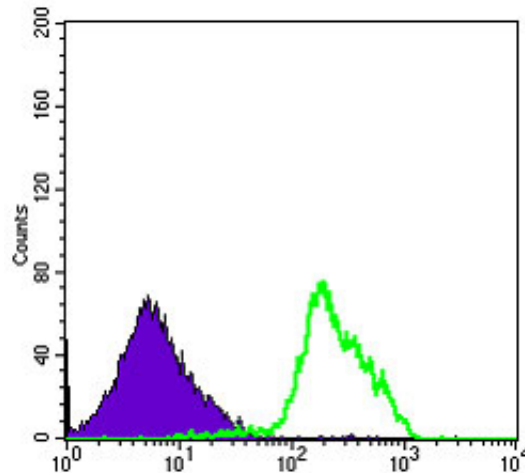


Figure 3: Flow cytometric analysis of RAJI cells using BECN1 mouse mAb (green) and negative control (purple).

**BECN1 Antibody - References**

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