

**BECN1 Antibody (Ascites)**  
**Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM1818b**

**Specification**

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**BECN1 Antibody (Ascites) - Product Information**

Application	IF, WB, IHC-P,E
Primary Accession	<a href="#">Q14457</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgM, κ

**BECN1 Antibody (Ascites) - Additional Information**

**Gene ID** 8678

**Other Names**

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

**Target/Specificity**

This BECN1 Monoclonal antibody was raised using purified His-tagged recombinant full length human Autophagy BECN1.

**Dilution**

IF~~1:10~50  
WB~~1:500~1000  
IHC-P~~1:50~100

**Format**

Mouse monoclonal antibody supplied in crude ascites with 0.09% (W/V) sodium azide.

**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**

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

**BECN1 Antibody (Ascites) - Protein Information**

**Name** BECN1

**Synonyms** GT197

**Function** Plays a central role in autophagy (PubMed:[18570871](#), PubMed:[21358617](#), PubMed:[23184933](#), PubMed:[23974797](#), PubMed:[25484083](#), PubMed:[28445460](#),

PubMed:[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](#), PubMed:[20643123](#), PubMed:[23974797](#), PubMed:[26783301](#)). Essential for the formation of PI3KC3-C2 but not PI3KC3-C1 PI3K complex forms. Involved in endocytosis (PubMed:[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 (Ascites) - Protocols

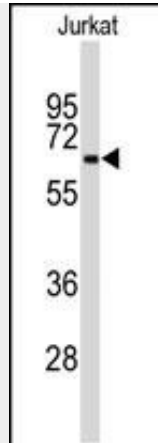
Provided below are standard protocols that you may find useful for product applications.

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

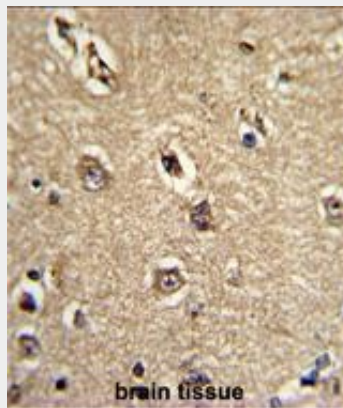
#### BECN1 Antibody (Ascites) - Images



Immunofluorescence analysis of BECN1 Monoclonal Antibody with paraffin-embedded human brain tissue .0.05 mg/ml primary antibody was followed by PE-conjugated goat anti-mouse IgG (whole molecule). PE emits orange fluorescence.



Western blot analysis of anti-BECN1 Monoclonal Antibody (Cat. #AM1818b) in Jurkat cell line lysates (35µg/lane). BECN1 (arrow) was detected using the Mab ascites (1:100 dilution).



Formalin-fixed and paraffin-embedded human brain with BECN1 Monoclonal Antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

### **BECN1 Antibody (Ascites) - Background**

Beclin-1 participates in the regulation of autophagy and has an important role in development, tumorigenesis, and neurodegeneration (Zhong et al., 2009 [PubMed 19270693]).

### **BECN1 Antibody (Ascites) - References**

Age at onset in Huntington's disease is modified by the autophagy pathway: implication of the V471A polymorphism in Atg7. Metzger S, et al. Hum Genet, 2010 Oct. PMID 20697744. Interaction of Beclin 1 with survivin regulates sensitivity of human glioma cells to TRAIL-induced apoptosis. Niu TK, et al. FEBS Lett, 2010 Aug 20. PMID 20638385. Regulation of amyloid precursor protein processing by the Beclin 1 complex. Jaeger PA, et al. PLoS One, 2010 Jun 15. PMID 20559548. Genetic and epigenetic silencing of the beclin 1 gene in sporadic breast tumors. Li Z, et al. BMC Cancer, 2010 Mar 16. PMID 20230646. Over-expression of the Beclin1 gene upregulates chemosensitivity to anti-cancer drugs by enhancing therapy-induced apoptosis in cervix squamous carcinoma CaSki cells. Sun Y, et al. Cancer Lett, 2010 Aug 28. PMID 20207475.