

# Beclin-1 mouse Monoclonal Antibody(5C2)

Catalog # AP63765

## Product Information

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Application	WB, IHC-P, IF, ICC
Primary Accession	<a href="#">Q14457</a>
Reactivity	Human, Rat, Mouse, Bovine
Host	Mouse
Clonality	Monoclonal
Calculated MW	51896

## Additional Information

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Gene ID	8678
Other Names	BECN1
Dilution	WB~~WB 1:1000-2000, IHC 1:100-200 IHC-P~~WB 1:1000-2000, IHC 1:100-200 IF~~1:50~200 ICC~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

## Protein Information

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Name	BECN1
Synonyms	GT197
Function	Plays a central role in autophagy (PubMed: <a href="#">18570871</a> , PubMed: <a href="#">21358617</a> , PubMed: <a href="#">23184933</a> , PubMed: <a href="#">23974797</a> , PubMed: <a href="#">25484083</a> , PubMed: <a href="#">28445460</a> , PubMed: <a href="#">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="#">20208530</a> , PubMed: <a href="#">20643123</a> , PubMed: <a href="#">23974797</a> , PubMed: <a href="#">26783301</a> ). Essential for the formation of PI3KC3-C2 but not PI3KC3-C1 PI3K complex forms. Involved in endocytosis (PubMed: <a href="#">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.

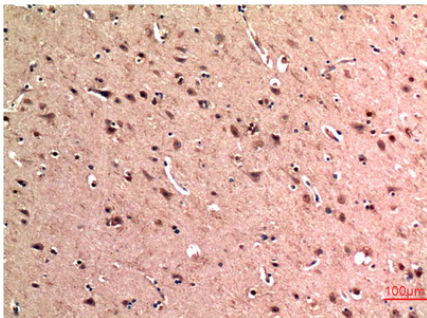
Endoplasmic reticulum membrane; Peripheral membrane protein. Mitochondrion membrane; Peripheral membrane protein. Endosome {ECO:0000250|UniProtKB:O88597} Cytoplasmic vesicle, autophagosome. Note=Interaction with ATG14 promotes translocation to autophagosomes. Expressed in dendrites and cell bodies of 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.

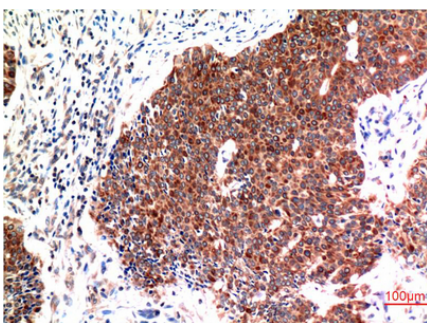
## Background

Plays a central role in autophagy (PubMed: [23184933](#), PubMed:[28445460](#)). Acts as 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:[20643123](#), PubMed:[20208530](#), PubMed:[26783301](#)). Essential for the formation of PI3KC3-C2 but not PI3KC3-C1 PI3K complex forms. Involved in endocytosis (PubMed:[25275521](#)). Protects against infection by a neurovirulent strain of Sindbis virus (PubMed:[9765397](#)). May play a role in antiviral host defense.

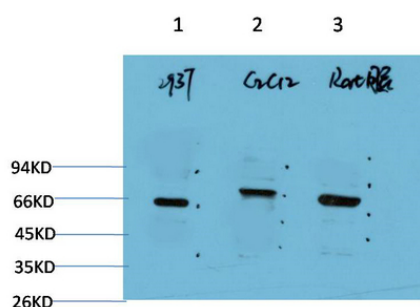
## Images



Immunohistochemical analysis of paraffin-embedded Human Brain Tissue using Beclin-1 Mouse mAb diluted at 1:200.



Immunohistochemical analysis of paraffin-embedded Human Breast Carcinoma Tissue using Beclin-1 Mouse mAb diluted at 1:200.



Western blot analysis of 1) 293T Cell Lysate, 2) C2C12 Cell Lysate, 3) Rat Brain Tissue Lysate using Beclin-1 Mouse mAb diluted at 1:2000.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.