

**Beclin-1 mouse Monoclonal Antibody(5C2)**  
Catalog # AP63765**Specification****Beclin-1 mouse Monoclonal Antibody(5C2) - Product Information**

Application	WB
Primary Accession	<a href="#">Q14457</a>
Reactivity	Human, Rat, Mouse
Host	Mouse
Clonality	Monoclonal

**Beclin-1 mouse Monoclonal Antibody(5C2) - Additional Information****Gene ID** 8678**Other Names**  
BECN1**Dilution**  
WB~~WB 1:1000-2000, IHC 1:100-200**Format**  
Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.**Storage Conditions**  
-20°C**Beclin-1 mouse Monoclonal Antibody(5C2) - 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>).

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

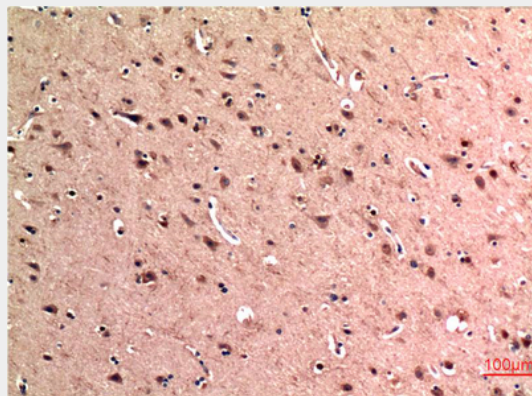
Ubiquitous.

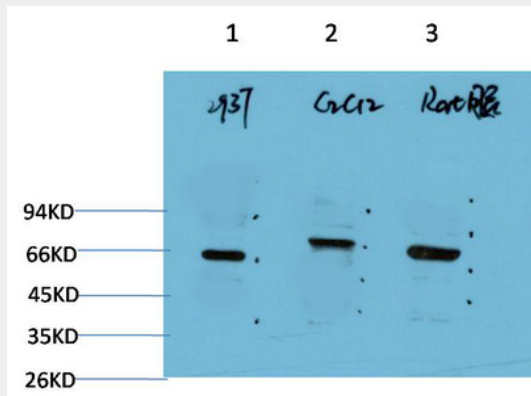
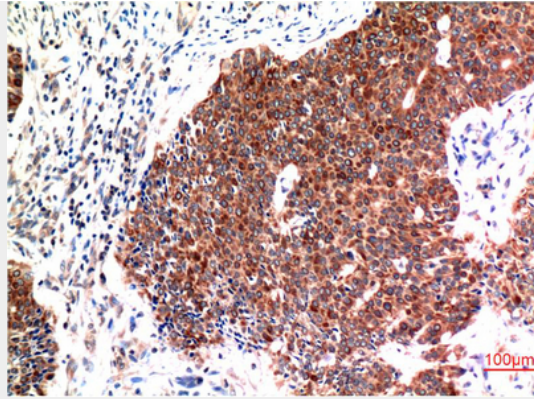
#### Beclin-1 mouse Monoclonal Antibody(5C2) - Protocols

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](#)

#### Beclin-1 mouse Monoclonal Antibody(5C2) - Images





### Beclin-1 mouse Monoclonal Antibody(5C2) - 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.