

# Beclin-1 mouse Monoclonal Antibody(5A11)

Catalog # AP63772

## **Product Information**

Application IHC-P Primary Accession 014457

**Reactivity** Human, Rat, Mouse

HostMouseClonalityMonoclonalCalculated MW51896

#### **Additional Information**

**Gene ID** 8678

Other Names BECN1

**Dilution** IHC-P~~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**

Name BECN1

Synonyms GT197

**Function** Plays a central role in autophagy (PubMed: <u>18570871</u>, PubMed:<u>21358617</u>,

PubMed:<u>23184933</u>, PubMed:<u>23974797</u>, PubMed:<u>25484083</u>,

PubMed:<u>28445460</u>, PubMed:<u>37776275</u>). 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:<u>26783301</u>). Essential for the formation of PI3KC3-C2 but not PI3KC3-C1 PI3K complex forms. Involved in endocytosis (PubMed:<u>25275521</u>).

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}

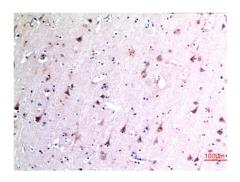
**Tissue Location** 

Ubiquitous.

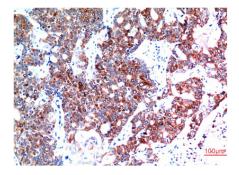
# **Background**

Plays a central role in autophagy (PubMed: <u>23184933</u>, PubMed: <u>28445460</u>). 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 abcission step in cytokinesis, probably in the context of PI3KC3-C2 (PubMed: <u>20643123</u>, PubMed: <u>20208530</u>, PubMed: <u>26783301</u>). Essential for the formation of PI3KC3-C2 but not PI3KC3-C1 PI3K complex forms. Involved in endocytosis (PubMed: <u>25275521</u>). Protects against infection by a neurovirulent strain of Sindbis virus (PubMed: <u>9765397</u>). 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.

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