

Beclin-1 mouse Monoclonal Antibody(5C2)

Catalog # AP63765

Product Information

Application	WB, IHC-P
Primary Accession	Q14457
Reactivity	Human, Rat, Mouse
Host	Mouse
Clonality	Monoclonal
Calculated MW	51896

Additional Information

Gene ID	8678
Other Names	BECN1
Dilution	WB~~WB 1:1000-2000, IHC 1:100-200 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: 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}

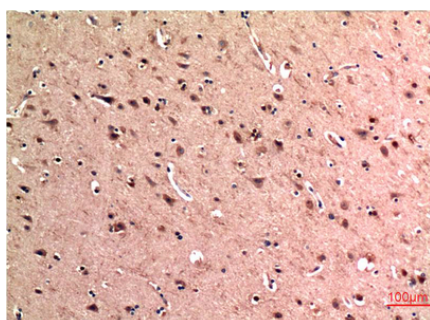
Tissue Location

Ubiquitous.

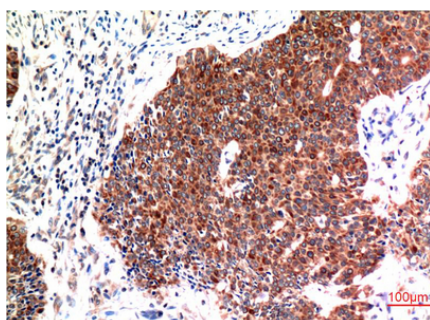
Background

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.

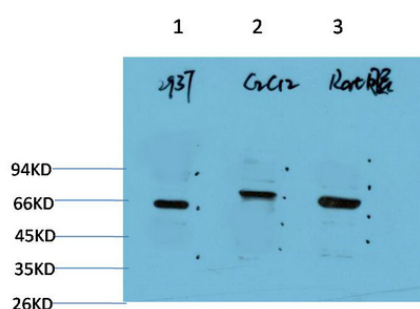
Images



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'.