

[KO]Beclin 1 Rabbit mAb

Catalog # AP79019

Product Information

Application	WB, IHC-P, IP
Primary Accession	Q14457
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Chromatography
Calculated MW	51896

Additional Information

Gene ID	8678
Other Names	BECN1
Dilution	WB~~1:1000 IHC-P~~N/A IP~~N/A
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

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. Required for the abscission step in cytokinesis. May play a role in antiviral host defense. Protects against infection by a neurovirulent strain of Sindbis virus.

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