

Beclin-1 Polyclonal Antibody

Catalog # AP63508

Product Information

Application	WB
Primary Accession	<u>Q14457</u>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	51896

Additional Information

Gene ID	8678
Other Names	BECN1; GT197; Beclin-1; Coiled-coil myosin-like BCL2-interacting protein; Protein GT197
Dilution	WB~~WB: 1:1000-2000
Format	PBS, pH 7.4, containing 0.09% (W/V) sodium azide as Preservative and 50% Glycerol.
Storage Conditions	-20°C

Protein Information

Name Synonyms	BECN1 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: <u>20208530</u> , PubMed: <u>20643123</u> , PubMed: <u>23974797</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>). 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:088597} 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:088597, ECO:0000269|PubMed:19050071} [Beclin-1-C 37 kDa]: Mitochondrion {ECO:0000250|UniProtKB:088597}

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



Western blot analysis of 1) Jurkat, 2) 293T, 3) C2C12, 4) Rat Kidney using Beclin-1 Polyclonal Antibody.. Secondary antibody was diluted at 1:20000

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