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Anti-Beclin 1 Antibody

Catalog # ABO11155

Product Information

Application	WB
Primary Accession	Q14457
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Beclin-1(BECN1) detection. Tested with WB in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	8678
Other Names	Beclin-1, Coiled-coil myosin-like BCL2-interacting protein, Protein GT197, Beclin-1-C 35 kDa, Beclin-1-C 37 kDa, BECN1, GT197
Calculated MW	51896
Application Details	Western blot, 0.1-0.5 □g/ml, Human, Mouse, Rat
Subcellular Localization	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 . Cytoplasmic vesicle, autophagosome . Interaction with ATG14 promotes translocation to autophagosomes. Expressed in dendrites and cell bodies of cerebellar Purkinje cells (By similarity). .
Tissue Specificity	Ubiquitous.
Source	Eukaryota
Protein Name	Beclin-1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human Beclin 1(222-237aa LDQEEAQYQREYSEFK), identical to the related rat and mouse sequences.

Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

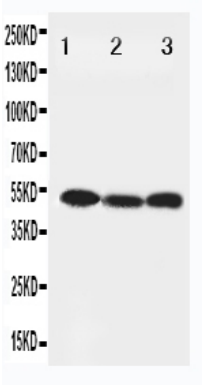
Protein Information

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

Bellini-1(beclin 1, autophagy related) is a protein that in humans is encoded by the BECN1 gene, also known as BECN1, ATG6, VPS30, Coiled-coil myosin-like BCL2-interacting protein, Protein GT197, autophagy-related gene(Atg) 6. Beclin-1 and its binding partner class III phosphoinositide 3-kinase(PI3K), also named Vps34, are required for the initiation of the formation of the autophagosome in autophagy.
Human beclin encodes a novel 450-amino acid protein containing a coiled-coil region, within which it has limited homology to myosin-like proteins. Northern blot analysis of mouse and adult human tissues revealed widespread beclin expression. A 2.2-kb transcript was present at highest levels in human skeletal muscle and at detectable levels in all tissues examined. In some tissues, additional 1.7- and 1.4-kb transcripts were observed, suggesting the presence of alternatively spliced transcripts. Immunoperoxidase staining of human hippocampus and frontal cortex sections revealed beclin immunoreactivity in many neurons throughout these regions, as well as in some glial cells. Beclin protects against infection by a neurovirulent strain of Sindbis virus that is known to overcome the protective effects of Bcl2. Liang et al. showed that beclin reduced Sindbis virus replication in mouse brain and reduced Sindbis virus-induced cell death in mouse brain.

Images



Anti-Beclin 1 antibody, ABO11155, Western blottingLane 1: HELA Cell LysateLane 2: SW620 Cell LysateLane 3: PANC Cell Lysate

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