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Anti-Beclin 1 Picoband Antibody

Catalog # ABO11790

Product Information

Application	WB, IHC-P
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, IHC-P 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	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Mouse, Rat, Human, By Heat Western blot, 0.1-0.5 □g/ml, Human
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 NaN3.
Immunogen	E.coli-derived human Beclin 1 recombinant protein (Position: M1-S354). Human Beclin 1 shares 97% amino acid (aa) sequence identity with both mouse and rat Beclin 1.

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

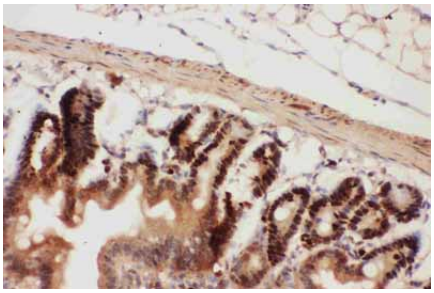
Name	BECN1
Synonyms	GT197
Function	Plays a central role in autophagy (PubMed: 18570871, PubMed:21358617, PubMed:23184933, PubMed:23974797, PubMed:25484083, PubMed:28445460, PubMed:37776275). Acts as a core subunit of the PI3K complex that mediates formation of phosphatidylinositol 3-phosphate; different 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.

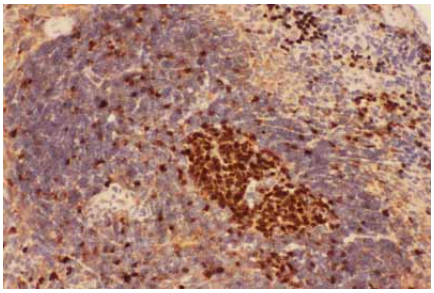
Background

Beclin-1, also known as also known as ATG6 or VPS30 is a protein that in humans is encoded by the BECN1 gene. 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. This gene participates in the regulation of autophagy and has an important role in development, tumorigenesis, and neurodegeneration. Schizophrenia is associated with low levels of Beclin-1 in the hippocampus of the affected which causes diminished autophagywhich in turn results in increased neuronal cell death. It has been found that beclin-1 can promote autophagy in autophagy-defective yeast with a targeted disruption of apg6/vps30, and in human MCF7 breast carcinoma cells.

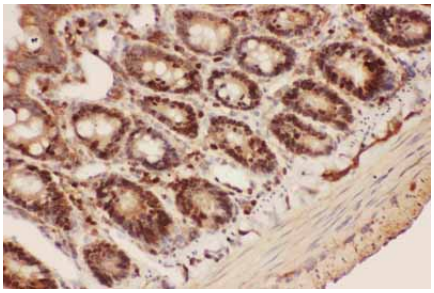
Images

Anti-Beclin 1 Picoband antibody, ABO11790-1.JPGIHC(P): Mouse Intestine Tissue

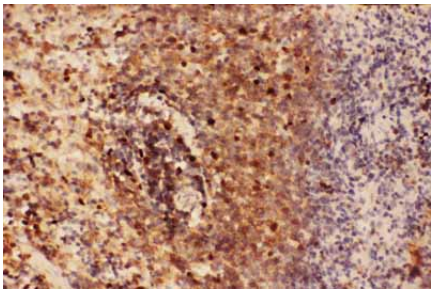




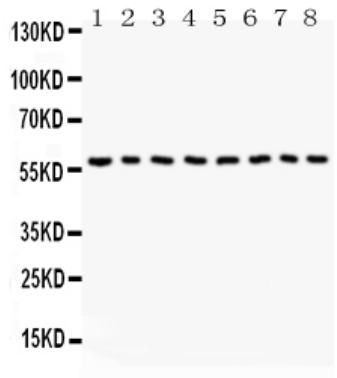
Anti-Beclin 1 Picoband antibody, ABO11790-2.JPGIHC(P): Mouse Spleen Tissue



Anti-Beclin 1 Picoband antibody, ABO11790-3.JPGIHC(P): Rat Intestine Tissue



Anti-Beclin 1 Picoband antibody, ABO11790-4.JPGIHC(P): Rat Spleen Tissue



Anti-Beclin 1 Picoband antibody, ABO11790-5.jpgAll lanes: Anti-Beclin-1 (ABO11790) at 0.5ug/mlLane 1: Colo320 Whole Cell Lysate at 40ugLane 2: HepG2 Whole Cell Lysate at 40ugLane 3: PANC Whole Cell Lysate at 40ugLane 4: A431 Whole Cell Lysate at 40ugLane 5: Smmc Whole Cell Lysate at 40ugLane 6: Jurkat Whole Cell Lysate at 40ugLane 7: SW620 Whole Cell Lysate at 40ugLane 8: U87 Whole Cell Lysate at 40ugPredicted bind size: 52KDObserved bind size: 60KD

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