10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Beclin 1 Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AP52755

Product Information

Application	WB
Primary Accession	Q14457
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	51896

Additional Information

Gene ID	8678
Other Names	APG6;ATG 6;ATG6;ATG6 autophagy related 6 homolog;Bcl-2-interacting protein beclin;Beclin 1 (coiled coil moesin like BCL2 interacting protein);Beclin 1 autophagy related;Beclin-1;Beclin1;BECN 1;BECN1;BECN1_HUMAN;Coiled coil myosin like BCL2 interacting protein; Coiled-coil myosin-like BCL2-interacting protein;GT197;Protein GT197;VPS 30;VPS30.
Dilution	WB~~1:1000
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.
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.

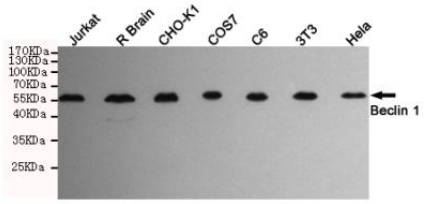
Background

Plays a central role in autophagy (PubMed: 23184933). Required for the abcission step in cytokinesis (PubMed:20208530). Protects against infection by a neurovirulent strain of Sindbis virus (PubMed:9765397). May play a role in antiviral host defense.

References

Liang X.H.,et al.J. Virol. 72:8586-8596(1998).
Aita V.M.,et al.Genomics 59:59-65(1999).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Rommens J.M.,et al.Genomics 28:530-542(1995).
Itakura E.,et al.Mol. Biol. Cell 19:5360-5372(2008).

Images



Western blot detection of Beclin 1 in Hela,3T3,C6,COS7,CHO-K1,Rat brain and Jurkat cell lysates using Beclin 1 mouse mAb (1:1000 diluted).Predicted band size:52KDa.Observed band size:55KDa.

Citations

- Loss of Concurrent Regulation of the Expression of BIF-1, BAX, and Beclin-1 in Primary and Metastatic Melanoma
- Inhibition of CRL-NEDD8 pathway as a new approach to enhance ATRA-induced differentiation of acute promyelocytic leukemia cells.
- Sphingosine Kinase 1 Protects Renal Tubular epithelial cells from Renal Fibrosis via Induction of Autophagy.

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