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BECN1 Antibody (Ascites)

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM1818b

Product Information

Application	WB, IHC-P, IF, E
Primary Accession	Q14457
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Mouse
Clonality	Monoclonal
Isotype	IgM, κ
Clone Names	117CT2.5.1.1
Calculated MW	51896

Additional Information

Gene ID	8678
Other Names	Beclin-1, Coiled-coil myosin-like BCL2-interacting protein, Protein GT197, BECN1, GT197
Target/Specificity	This BECN1 Monoclonal antibody was raised using purified His-tagged recombinant full length human Autophagy BECN1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 IF~~1:10~50 E~~Use at an assay dependent concentration.
Format	Mouse monoclonal antibody supplied in crude ascites with 0.09% (W/V) sodium azide.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	BECN1 Antibody (Ascites) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

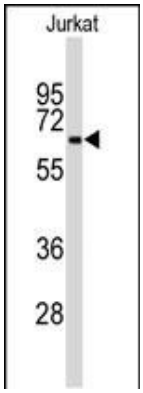
Background

Beclin-1 participates in the regulation of autophagy and has an important role in development, tumorigenesis, and neurodegeneration (Zhong et al., 2009 [PubMed 19270693]).

References

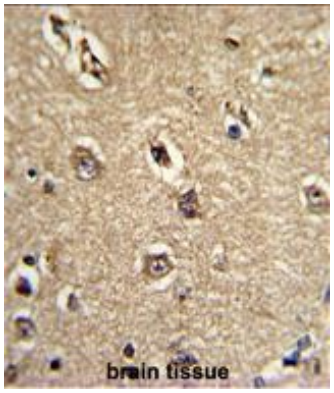
Age at onset in Huntington's disease is modified by the autophagy pathway: implication of the V471A polymorphism in Atg7. Metzger S, et al. Hum Genet, 2010 Oct. PMID 20697744. Interaction of Beclin 1 with survivin regulates sensitivity of human glioma cells to TRAIL-induced apoptosis. Niu TK, et al. FEBS Lett, 2010 Aug 20. PMID 20638385. Regulation of amyloid precursor protein processing by the Beclin 1 complex. Jaeger PA, et al. PLoS One, 2010 Jun 15. PMID 20559548. Genetic and epigenetic silencing of the beclin 1 gene in sporadic breast tumors. Li Z, et al. BMC Cancer, 2010 Mar 16. PMID 20230646. Over-expression of the Beclin1 gene upregulates chemosensitivity to anti-cancer drugs by enhancing therapy-induced apoptosis in cervix squamous carcinoma CaSki cells. Sun Y, et al. Cancer Lett, 2010 Aug 28. PMID 20207475.

Images



Western blot analysis of anti-BECN1 Monoclonal Antibody (Cat. #AM1818b) in Jurkat cell line lysates (35µg/lane). BECN1 (arrow) was detected using the Mab ascites (1:100 dilution).

Formalin-fixed and paraffin-embedded human brain with



BECN1 Monoclonal Antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Immunofluorescence analysis of BECN1 Monoclonal Antibody with paraffin-embedded human brain tissue .0.05 mg/ml primary antibody was followed by PE-conjugated goat anti-mouse lgM (whole molecule). PE emits orange fluorescence.

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