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BECN1 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1534a

Product Information

Application	WB, IHC, FC, E
Primary Accession	Q14457
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	2A4
Isotype	IgG1
Calculated MW	51896
Description	Beclin-1 participates in the regulation of autophagy and has an important role in development, tumorigenesis, and neurodegeneration (Zhong et al., 2009 (PubMed 19270693)).(supplied by OMIM) . Tissue specificity: Ubiquitous.
Immunogen	Purified recombinant fragment of human BECN1 expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID	8678
Other Names	Beclin-1, Coiled-coil myosin-like BCL2-interacting protein, Protein GT197, BECN1, GT197
Dilution	WB~~1/500 - 1/2000 IHC~~1/500 - 1/2000 FC~~1/200 - 1/400 E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	BECN1 Antibody 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.

References

1. Autophagy. 2008 Oct 1;4(7):947-8. 2. J Clin Invest. 2008 Jun;118(6):2190-9.

Images

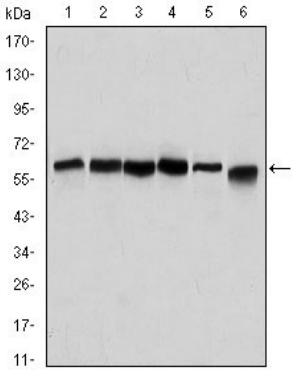


Figure 1: Western blot analysis using BECN1 mouse mAb against Hela (1), A431 (2), MCF-7 (3), RAJI (4), Jurkat (5) and SKBR-3 (6) cell lysate.

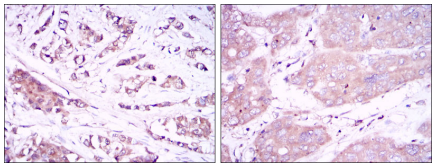
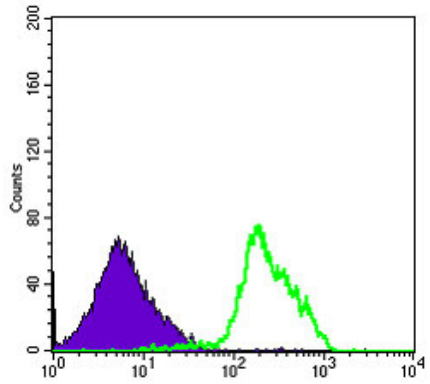


Figure 2: Immunohistochemical analysis of paraffin-embedded breast cancer tissues (left) and liver cancer tissues (right) using BECN1 mouse mAb with DAB staining.

Figure 3: Flow cytometric analysis of RAJI cells using BECN1 mouse mAb (green) and negative control (purple).



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