

Phospho-Belcin 1 Antibody
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3765a

Specification

Phospho-Belcin 1 Antibody - Product Information

Application	DB,E
Primary Accession	Q14457
Other Accession	Q6GP52 , Q91XJ1 , Q4A1L5 , O88597 , Q5ZKS6 , Q4A1L4 , NP_003757.1
Reactivity Predicted	Human Bovine, Chicken, Mouse, Pig, Rat, Xenopus
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG

Phospho-Belcin 1 Antibody - Additional Information

Gene ID 8678

Other Names

Beclin-1, Coiled-coil myosin-like
BCL2-interacting protein, Protein GT197,
BECN1, GT197

Target/Specificity

This Belcin 1

Dilution

DB~~1:500

Format

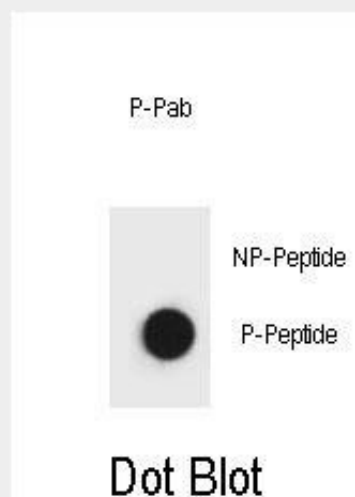
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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

Phospho-Belcin 1 Antibody is for research



Phospho-Belcin 1 Antibody - 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]).[supplied by OMIM].

Phospho-Belcin 1 Antibody - References

Koukourakis, M.I., et al. Br. J. Cancer 103(8):1209-1214(2010) Jaeger, P.A., et al. Arch. Neurol. 67(10):1181-1184(2010) Metzger, S., et al. Hum. Genet. 128(4):453-459(2010) Oberstein, A., et al. J. Biol. Chem. 282(17):13123-13132(2007) Furuya, N., et al. Autophagy 1(1):46-52(2005)

use only and not for use in diagnostic or therapeutic procedures.

Phospho-Belcin 1 Antibody - Protein Information

Name BECN1

Synonyms GT197

Function

Plays a central role in autophagy (PubMed:23184933, PubMed:28445460). Acts as 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:20643123, PubMed:20208530, PubMed:26783301). Essential for the formation of PI3KC3-C2 but not PI3KC3-C1 PI3K complex forms. Involved in endocytosis (PubMed:25275521). Protects against infection by a neurovirulent strain of Sindbis virus (PubMed:9765397). May play a role in antiviral host defense.

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:O88597, ECO:0000269|PubMed:19713971, ECO:0000269|PubMed:21364619}. 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.

Phospho-Belcin 1 Antibody - Protocols

Provided below are standard protocols that you
may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Phospho-Belcin 1 Antibody - Citations

- [The protective effort of GPCR kinase 2-interacting protein-1 in neurons via promoting Beclin1-Parkin induced mitophagy at the early stage of spinal cord ischemia-reperfusion injury](#)
- [GIT1 contributes to autophagy in osteoclast through disruption of the binding of Beclin1 and Bcl2 under starvation condition.](#)
- [Lipin-1 determines lung cancer cell survival and chemotherapy sensitivity by regulation of endoplasmic reticulum homeostasis and autophagy.](#)
- [Regulation of Beclin 1 Protein Phosphorylation and Autophagy by Protein Phosphatase 2A \(PP2A\) and Death-associated Protein Kinase 3 \(DAPK3\).](#)