

Phospho-beclin 1(S64) Blocking Peptide
Synthetic peptide
Catalog # BP3836a

Specification

Phospho-beclin 1(S64) Blocking Peptide - Product Information

Primary Accession [O14457](#)
Other Accession [NP_003757.1](#)

Phospho-beclin 1(S64) Blocking Peptide - Additional Information

Gene ID 8678

Other Names

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

Target/Specificity

The synthetic peptide sequence is selected from aa 61-73 of HUMAN BECN1

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Phospho-beclin 1(S64) Blocking Peptide - Protein Information

Name BECN1

Synonyms GT197

Function

Plays a central role in autophagy (PubMed: [18570871](http://www.uniprot.org/citations/18570871), PubMed: [21358617](http://www.uniprot.org/citations/21358617), PubMed: [23184933](http://www.uniprot.org/citations/23184933), PubMed: [23974797](http://www.uniprot.org/citations/23974797), PubMed: [25484083](http://www.uniprot.org/citations/25484083), PubMed: [28445460](http://www.uniprot.org/citations/28445460), PubMed: [37776275](http://www.uniprot.org/citations/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.

Phospho-beclin 1(S64) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

Phospho-beclin 1(S64) Blocking Peptide - Images

Phospho-beclin 1(S64) Blocking Peptide - 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-beclin 1(S64) Blocking Peptide - 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)