

**Phospho-beclin 1(S64) Antibody**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP3836a**

## Specification

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### Phospho-beclin 1(S64) Antibody - Product Information

Application	DB,E
Primary Accession	<a href="#">Q14457</a>
Other Accession	<a href="#">NP_003757.1</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	51896

### Phospho-beclin 1(S64) Antibody - Additional Information

**Gene ID** 8678

#### Other Names

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

#### Target/Specificity

This beclin 1 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S64 of human beclin 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-beclin 1(S64) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Phospho-beclin 1(S64) Antibody - 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

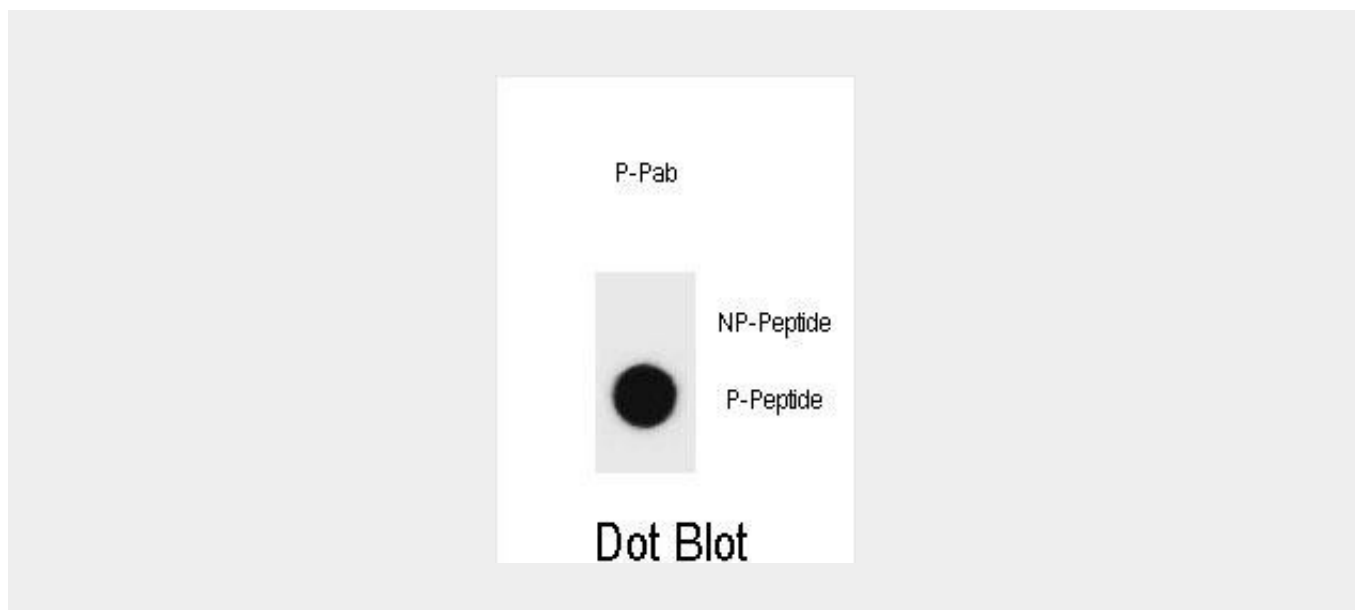
Ubiquitous.

#### Phospho-beclin 1(S64) 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-beclin 1(S64) Antibody - Images



Dot blot analysis of beclin 1 Antibody (Phospho S64) Phospho-specific Pab (Cat. #AP3836a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.6ug per ml.

#### **Phospho-beclin 1(S64) 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-beclin 1(S64) 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)