

# Phospho-beclin 1(S64) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)  
Catalog # AP3836a

## Product Information

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<b>Application</b>	WB, DB, E
<b>Primary Accession</b>	<a href="#">Q14457</a>
<b>Other Accession</b>	<a href="#">NP_003757.1</a>
<b>Reactivity</b>	Human
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB41700
<b>Calculated MW</b>	51896

## Additional Information

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<b>Gene ID</b>	8678
<b>Other Names</b>	Beclin-1, Coiled-coil myosin-like BCL2-interacting protein, Protein GT197, BECN1, GT197
<b>Target/Specificity</b>	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.
<b>Dilution</b>	WB~~1:1000 DB~~1:500 E~~Use at an assay dependent concentration.
<b>Format</b>	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
<b>Storage</b>	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.
<b>Precautions</b>	Phospho-beclin 1(S64) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	BECN1
<b>Synonyms</b>	GT197
<b>Function</b>	Plays a central role in autophagy (PubMed: <a href="#">18570871</a> , PubMed: <a href="#">21358617</a> , PubMed: <a href="#">23184933</a> , PubMed: <a href="#">23974797</a> , PubMed: <a href="#">25484083</a> ,

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.

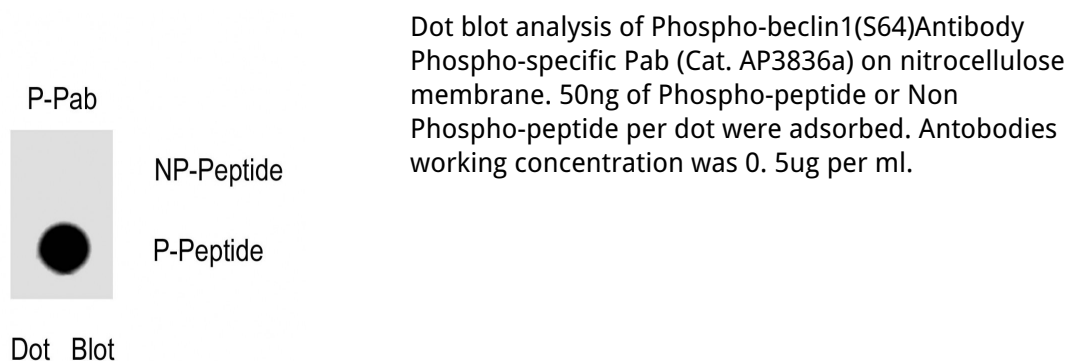
## Background

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

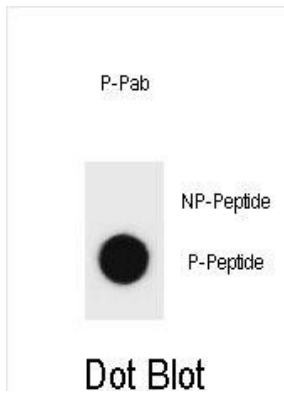
## References

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)

## 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.

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