

# Phospho-Endophilin(Y80) Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP3682a

## **Product Information**

Application	DB, E
Primary Accession	<u>Q9Y371</u>
Other Accession	<u>Q6AYE2, Q9JK48, Q32LM0</u>
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB15349
Calculated MW	40796

### **Additional Information**

Gene ID	51100
Other Names	Endophilin-B1, Bax-interacting factor 1, Bif-1, SH3 domain-containing GRB2-like protein B1, SH3GLB1, KIAA0491
Target/Specificity	This Endophilin Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding Y80 of human Endophilin.
Dilution	DB~~1:500 E~~Use at an assay dependent concentration.
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-Endophilin(Y80) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Protein Information**

Name	SH3GLB1
Synonyms	KIAA0491
Function	May be required for normal outer mitochondrial membrane dynamics

	(PubMed: <u>15452144</u> ). Required for coatomer-mediated retrograde transport in certain cells (By similarity). May recruit other proteins to membranes with high curvature. May promote membrane fusion (PubMed: <u>11604418</u> ). Involved in activation of caspase-dependent apoptosis by promoting BAX/BAK1 activation (PubMed: <u>16227588</u> ). Isoform 1 acts proapoptotic in fibroblasts (By similarity). Involved in caspase- independent apoptosis during nutrition starvation and involved in the regulation of autophagy. Activates lipid kinase activity of PIK3C3 during autophagy probably by associating with the PI3K complex II (PI3KC3-C2) (PubMed: <u>17891140</u> ). Associated with PI3KC3-C2 during autophagy may regulate the trafficking of ATG9A from the Golgi complex to the peripheral cytoplasm for the formation of autophagosomes by inducing Golgi membrane tubulation and fragmentation (PubMed: <u>21068542</u> ). Involved in regulation of degradative endocytic trafficking and cytokinesis, probably in the context of PI3KC3-C2 (PubMed: <u>20643123</u> ). Isoform 2 acts antiapoptotic in neuronal cells; involved in maintenance of mitochondrial morphology and promotes neuronal viability (By similarity).
Cellular Location	Cytoplasm. Golgi apparatus membrane; Peripheral membrane protein. Mitochondrion outer membrane; Peripheral membrane protein. Cytoplasmic vesicle, autophagosome membrane. Midbody. Note=Association with the Golgi apparatus depends on the cell type (By similarity). Following starvation colocalizes with ATG5 and LC3 autophagy-related protein(s)on autophagosomal membranes (PubMed:17891140). {ECO:0000250, ECO:0000269 PubMed:17891140}
Tissue Location	Highly expressed in heart, skeletal muscle, kidney and placenta. Detected at lower levels in brain, colon, thymus, spleen, liver, small intestine, lung and peripheral blood leukocytes

## Background

Endophilin may be required for normal outer mitochondrial membrane dynamics. It is required for coatomer-mediated retrograde transport in certain cells. It may recruit other proteins to membranes with high curvature and may promote membrane fusion.

## References

Maiuri,M.C., et.al., Cell Death Differ. 16 (1), 87-93 (2009) Yamaguchi,H., et.al., J. Biol. Chem. 283 (27), 19112-19118 (2008) Takahashi,Y., et.al, Nat. Cell Biol. 9 (10), 1142-1151 (2007)

#### Images



Dot blot analysis of anti-Phospho-Endophilin-pY80 Pab (Cat. #AP3682a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml. Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.