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# Endophilin B1 Antibody (Y80)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8034a

## Product Information

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| **Application** | WB, IHC-P, E |
| **Primary Accession** | Q9Y371 |
| **Other Accession** | Q6AYE2, Q9JK48, Q32LM0 |
| **Reactivity** | Human |
| **Predicted** | Mouse, Rat, Bovine, Canine, Rabbit, Chicken |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB15350 |
| **Calculated MW** | 40796 |
| **Antigen Region** | 59-86 |

## Additional Information

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| **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 B1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 59-86 amino acids from human Endophilin B1. |
| **Dilution** | WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration. |
| **Format** | 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. |
| **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** | Endophilin B1 Antibody (Y80) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | SH3GLB1 |
| **Synonyms** | KIAA0491 |

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| **Function** | May be required for normal outer mitochondrial membrane dynamics (PubMed:15452144). 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:11604418). Involved in activation of caspase-dependent apoptosis by promoting BAX/BAK1 activation (PubMed:16227588). 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:17891140). 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:21068542). Involved in regulation of degradative endocytic trafficking and cytokinesis, probably in the context of PI3KC3-C2 (PubMed:20643123). 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 |

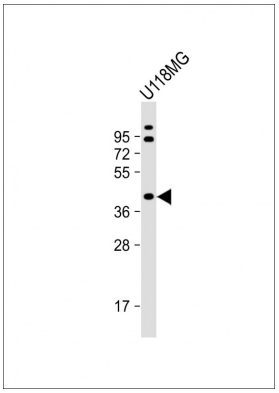
## Background

Endophilin B1 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.

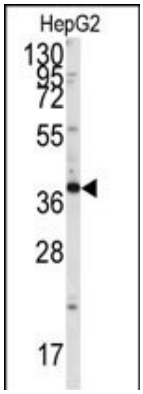
## References


Yamaguchi,H., J. Biol. Chem. 283 (27), 19112-19118 (2008)
Lee,J.W., Pathology 38 (4), 312-315 (2006)
Masuda,M., EMBO J. 25 (12), 2889-2897 (2006)

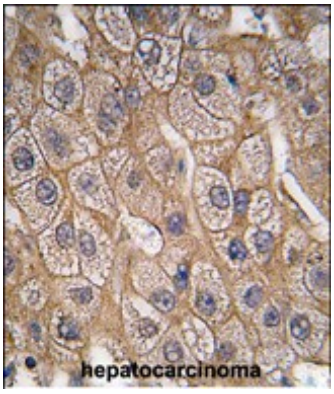

## Images




Anti-Endophilin Antibody (Y80) at 1:1000 dilution + U118MG whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 41 kDa Blocking/Dilution buffer: 5% NFDM/TBST.




Western blot analysis of anti-Endophilin B1 Antibody (Y80) (Cat.#AP8034a) in HepG2 cell line lysates (35ug/lane). SH3GLB1 (arrow) was detected using the purified Pab.




Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with Endophilin B1 Antibody (Y80) (Cat.#AP8034a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

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