

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Endophilin B1/Bif-1 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human SH3GLB2 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Endophilin B1/Bif-1 Ala33-Asn189 Accession # Q9Y371
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Endophilin-B1, also known as SH3GLB1 (Src-Homology 3 Domain-containing GRB2-like protein B1) and BIF-1, is a 40 kDa protein that belongs to the endophilin family of molecules. It is a cytoplasmic and Golgi membrane protein that is expressed in neurons, striated (skeletal and cardiac) muscle cells, and placenta. Endophilin-B1 plays a role in cell homeostasis. In neurons, Endophilin-B1 is phosphorylated by Cdk5, inducing homodimerization and autophagosome formation. In addition, it appears to play a role in the maintenance of mitochondrial integrity. Endophilin-B1 appears to cycle on-and-off the outer mitochondrial membrane (OMM), contributing to OMM integrity. And after the initiation of endocytosis, it also directs EEA1+ TrkA-containing endosomes back into the cell membrane for reuse. Human Endophilin-B1 is 365 amino acids (aa) in length. It possesses an N-terminal lipid-binding BAR (Bin/Amphiphysin/Rvs) domain (aa 27-261) that contains an internal coiled-coil region, and a C-terminal SH3 domain that binds Pro-rich sequences on potential ligands (309-363). There are at least three potential splice variants for Endophilin-B1. Two are 42 and 43 kDa in size, and possess a 21 and 29 aa insertion after Ser190, respectively. A third potentially utilizes an alternative start site at Met101. Over aa 33-189, human Endophilin-B1 shares 98% aa sequence identity with mouse Endophilin-B1.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc., and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.