The endophilins comprise a family of three SH3 domain-containing proteins designated Endophilin I, II, and III, or alternatively known as SH3P4, SH3P8 and SH3P13, respectively. These proteins associate with Amphiphysin, Synaptotagmin andDynamin and are implicated in presynaptic vesicle trafficking ataffectometric terminals. The expression patterns ofthe endophilins are consistent withtheircellular functions atthe neuronal synapse, as Endophilin I is expressed only in the brain. Endophilin B1 is required for maintenance of mitochondrial morphology and for the regulation of the outer mitochondrial membrane dynamics. The N-terminal domain of Endophilin B1 shares highest similarity with the lipid-binding and -modifying (LBM) domain of class A endophilins.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: SH3GLB1 (human) mapping to 1p22.3; Sh3glb1 (mouse) mapping to 3 H2.

SOURCE

Endophilin B1 (M-62) is a rabbit polyclonal antibody raised against amino acids 250-311 mapping near the C-terminus of Endophilin B1 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Endophilin B1 (M-62) is recommended for detection of Endophilin B1 of mouse, rat and, to a lesser extent, human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Endophilin B1 siRNA (m): sc-63283, Endophilin B1 shRNA Plasmid (m): sc-63283-SH and Endophilin B1 shRNA (m) Lentiviral Particles: sc-63283-V.

Molecular Weight of Endophilin B1: 43 kDa.

Positive Controls: mouse brain extract: sc-2253, Hep G2 cell lysate: sc-2227 or HeLa whole cell lysate: sc-2200.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our website at www.scbt.com or our catalog for detailed protocols and support products.