

# Endophilin I (L-18): sc-10875

## BACKGROUND

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, synaptojanin and dynamin and are implicated in presynaptic vesicle trafficking at nerve terminals. The expression patterns of the endophilins are consistent with their cellular functions at the neuronal synapse, as Endophilin I is expressed only in the brain. Both Endophilin II and Endophilin III are detected in a variety of tissues. Endophilin I is also implicated in modulating G protein-coupled receptor signaling by functioning as an adapter protein and directing  $\beta$ 1 adrenergic receptors to the endocytic machinery.

## REFERENCES

1. Giachino, C., et al. 1997. Novel SH3-containing human gene family preferentially expressed in the central nervous system. *Genomics* 41: 427-434.
2. Ringstad, N., et al. 1997. The SH3p4/Sh3p8/ SH3p13 protein family: binding partners for synaptojanin and dynamin via a GRB2-like Src homology 3 domain. *Proc. Natl. Acad. Sci. USA* 94: 8569-8574.

## CHROMOSOMAL LOCATION

Genetic locus: SH3GL2 (human) mapping to 9p22.2; Sh3gl2 (mouse) mapping to 4 C4.

## SOURCE

Endophilin I (L-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Endophilin I of mouse origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-10875 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Endophilin I (L-18) is recommended for detection of Endophilin I of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 I siRNA (h): sc-35304, Endophilin I siRNA (m): sc-35305, Endophilin I shRNA Plasmid (h): sc-35304-SH, Endophilin I shRNA Plasmid (m): sc-35305-SH, Endophilin I shRNA (h) Lentiviral Particles: sc-35304-V and Endophilin I shRNA (m) Lentiviral Particles: sc-35305-V.

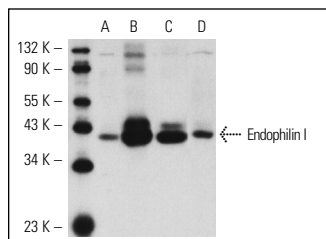
Molecular Weight of Endophilin I: 40 kDa.

Positive Controls: mouse brain extract: sc-2253, mouse testis extract: sc-2405 or rat brain extract: sc-2392.

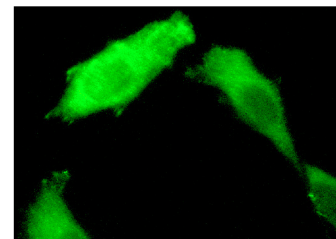
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

## DATA



Endophilin I (L-18): sc-10875. Western blot analysis of Endophilin I expression in F9 whole cell lysate (A) and mouse brain (B), rat brain (C) and mouse testis (D) tissue extracts.



Endophilin I (L-18): sc-10875. Immunofluorescence staining of methanol-fixed SK-N-SH cells showing cytoplasmic staining.

## 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 web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Satisfaction  
Guaranteed

Try **Endophilin I (D-3): sc-48378** or **Endophilin I (G-8): sc-46702**, our highly recommended monoclonal alternatives to Endophilin I (L-18).