

# Endophilin B1 (S-20): sc-50566

## BACKGROUND

The endophilins comprise a family of proteins that 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. Endophilin B1 is a member of the B subgroup of the endophilin family that 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. The Endophilin B1 gene encodes at least three splice variants: Endophilin B1a, which shows a widespread tissue distribution, and Endophilin B1b and B1c, which appear to be brain-specific.

## REFERENCES

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- Engidawork, E., Gulesserian, T., Fountoulakis, M. and Lubec, G. 2003. Aberrant protein expression in cerebral cortex of fetus with Down syndrome. *Neuroscience* 122: 145-154.
- Karbowski, M., Jeong, S.Y. and Youle, R.J. 2004. Endophilin B1 is required for the maintenance of mitochondrial morphology. *J. Cell Biol.* 166: 1027-1039.
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## CHROMOSOMAL LOCATION

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

## SOURCE

Endophilin B1 (S-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Endophilin B1 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-50566 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Endophilin B1 (S-20) is recommended for detection of Endophilin B1 of mouse, rat and 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).

Endophilin B1 (S-20) is also recommended for detection of Endophilin B1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Endophilin B1 siRNA (h): sc-63282, Endophilin B1 siRNA (m): sc-63283, Endophilin B1 shRNA Plasmid (h): sc-63282-SH, Endophilin B1 shRNA Plasmid (m): sc-63283-SH, Endophilin B1 shRNA (h) Lentiviral Particles: sc-63282-V and Endophilin B1 shRNA (m) Lentiviral Particles: sc-63283-V.

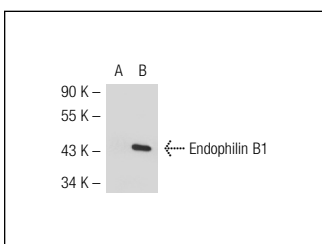
Molecular Weight of Endophilin B1: 43 kDa.

Positive Controls: Endophilin B1 (m): 293T Lysate: sc-120038, HeLa whole cell lysate: sc-2200 or NIH/3T3 whole cell lysate: sc-2210.

## 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™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 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™ Mounting Medium: sc-24941.

## DATA



Endophilin B1 (S-20): sc-50566. Western blot analysis of Endophilin B1 expression in non-transfected: sc-117752 (A) and mouse Endophilin B1 transfected: sc-120038 (B) 293T whole cell lysates.

## 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.