

Endophilin I-III (H-300): sc-30101

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., Lantelme, E., Lanzetti, L., Saccone, S., Bella Valle, G. and Migone, N.A. 1997. Novel SH3-containing human gene family preferentially expressed in the central nervous system. *Genomics* 41: 427-434.
2. Ringstad, N., Nemoto, Y. and De Camilli, P. 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.

SOURCE

Endophilin I-III (H-300) is a rabbit polyclonal antibody raised against amino acids 53-352 mapping at the C-terminus of Endophilin I-III of human origin.

PRODUCT

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

STORAGE

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

APPLICATIONS

Endophilin I-III (H-300) is recommended for detection of Endophilin I, II and III of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

Endophilin I-III (H-300) is also recommended for detection of Endophilin I, II and III in additional species, including equine, canine, bovine, porcine and avian.

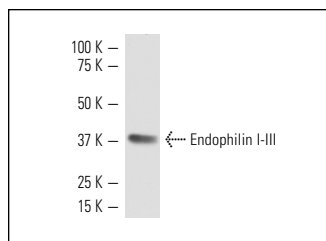
Molecular Weight of Endophilin I-III: 40 kDa.

Positive Controls: Mouse brain extract: sc-2253, rat testis extract: sc-2400 or rat brain extract: sc-2392.

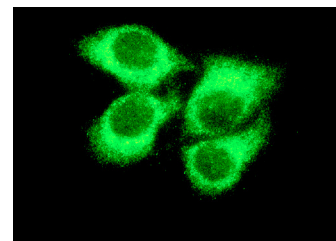
RECOMMENDED SECONDARY REAGENTS

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) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



Endophilin I-III (H-300): sc-30101. Western blot analysis of Endophilin I-III expression in mouse brain tissue extract.



Endophilin I-III (H-300): sc-30101. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

RESEARCH USE

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

PROTOCOLS

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



Try **Endophilin II (A-11): sc-365704**, our highly recommended monoclonal alternative to Endophilin I-III (H-300).