SANTA CRUZ BIOTECHNOLOGY, INC.

Endophilin III (m): 293T Lysate: sc-126796

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 β_1-adrenergic receptors to the endocytic machinery.

REFERENCES

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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.
3. Micheva, K.D., Ramjaun, A.R., Kay, B.K. and McPherson, P.S. 1997 SH3 domain-dependent interactions of Endophilin with Amphiphysin. FEBS Lett. 414: 308-312.
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6. Simpson, F., Hussain, N.K., Qualmann, B., Kelly, R.B., Kay, B.K., McPherson, P.S. and Schmid, S.L. 1999. SH3-domain-containing proteins function at distinct steps in Clathrin-coated vesicle formation. Nat. Cell Biol. 1: 119-124.

CHROMOSOMAL LOCATION

Genetic locus: Sh3gl3 (mouse) mapping to 7 D3.

PRODUCT

Endophilin III (m): 293T Lysate represents a lysate of mouse Endophilin III transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

Endophilin III (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Endophilin III antibodies. Recommended use: 10-20 µl per lane.

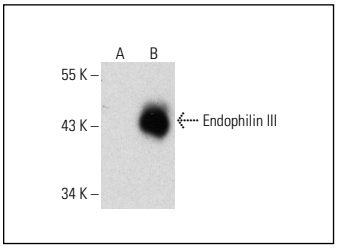
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Endophilin I-III (F-4): sc-376592 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Endophilin III expression in Endophilin III transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Endophilin III (F-4): sc-376592. Western blot analysis of Endophilin III expression in non-transfected: sc-117752 (**A**) and mouse Endophilin III transfected: sc-126796 (**B**) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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