

Endophilin B2 (h2): 293T Lysate: sc-177187

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. Endophilin B2 is also a member of the Endophilin B subgroup that is ubiquitously expressed but shows highest levels in brain, adult lung, ovary, and spinal cord. Decreased levels of Endophilin B2 are found in Down syndrome and may reflect brain dysgenesis.

REFERENCES

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- Modregger, J., et al. 2003. Characterization of Endophilin B1b, a brain-specific membrane-associated lysophosphatidic acid acyl transferase with properties distinct from Endophilin A1. *J. Biol. Chem.* 278: 4160-4167.
- Wang, M.Q., et al. 2003. Endophilins interact with Moloney murine leukemia virus $G_{\alpha\gamma}$ and modulate virion production. *J. Biol.* 3: 4.
- Engidawork, E., et al. 2003. Aberrant protein expression in cerebral cortex of fetus with Down syndrome. *Neuroscience* 122: 145-154.
- Karbowsky, M., et al. 2004. Endophilin B1 is required for the maintenance of mitochondrial morphology. *J. Cell Biol.* 166: 1027-1039.
- Takahashi, Y., et al. 2005. Loss of Bif-1 suppresses Bax/Bak conformational change and mitochondrial apoptosis. *Mol. Cell. Biol.* 25: 9369-9382.
- Aramaki, Y., et al. 2005. Direct interaction between metastasis-associated protein 1 and Endophilin 3. *FEBS Lett.* 579: 3731-3736.

CHROMOSOMAL LOCATION

Genetic locus: SH3GLB2 (human) mapping to 9q34.11.

PRODUCT

Endophilin B2 (h2): 293T Lysate represents a lysate of human Endophilin B2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Endophilin B2 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive Endophilin B2 antibodies. Recommended use: 10-20 µl per lane.

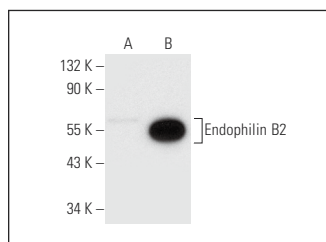
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Endophilin B2 (E-2): sc-393989 is recommended as a positive control antibody for Western Blot analysis of enhanced human Endophilin B2 expression in Endophilin B2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

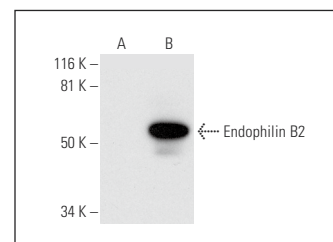
RECOMMENDED SUPPORT REAGENTS

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 B2 (E-2): sc-393989. Western blot analysis of Endophilin B2 expression in non-transfected: sc-117752 (A) and human Endophilin B2 transfected: sc-177187 (B) 293T whole cell lysates.



Endophilin B2 (A-12): sc-398040. Western blot analysis of Endophilin B2 expression in non-transfected: sc-117752 (A) and human Endophilin B2 transfected: sc-177187 (B) 293T whole cell lysates.

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.

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.