

Endophilin B2 (A-10): sc-365608

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

- Pierrat, B., et al. 2001. SH3GLB, a new Endophilin-related protein family featuring an SH3 domain. *Genomics* 71: 222-234.
- 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.

CHROMOSOMAL LOCATION

Genetic locus: SH3GLB2 (human) mapping to 9q34.11; Sh3glb2 (mouse) mapping to 2 B.

SOURCE

Endophilin B2 (A-10) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 181-209 within an internal region of Endophilin B2 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Endophilin B2 (A-10) is available conjugated to agarose (sc-365608 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365608 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365608 PE), fluorescein (sc-365608 FITC), Alexa Fluor[®] 488 (sc-365608 AF488), Alexa Fluor[®] 546 (sc-365608 AF546), Alexa Fluor[®] 594 (sc-365608 AF594) or Alexa Fluor[®] 647 (sc-365608 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-365608 AF680) or Alexa Fluor[®] 790 (sc-365608 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-365608 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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STORAGE

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

APPLICATIONS

Endophilin B2 (A-10) is recommended for detection of all isoforms of Endophilin B2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 B2 (A-10) is also recommended for detection of all isoforms of Endophilin B2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Endophilin B2 siRNA (h): sc-60579, Endophilin B2 siRNA (m): sc-60580, Endophilin B2 shRNA Plasmid (h): sc-60579-SH, Endophilin B2 shRNA Plasmid (m): sc-60580-SH, Endophilin B2 shRNA (h) Lentiviral Particles: sc-60579-V and Endophilin B2 shRNA (m) Lentiviral Particles: sc-60580-V.

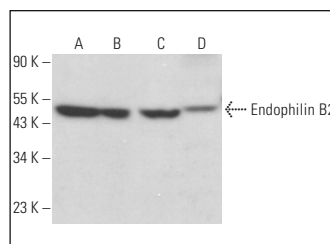
Molecular Weight of Endophilin B2: 44 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, U-87 MG cell lysate: sc-2411 or HeLa whole cell lysate: sc-2200.

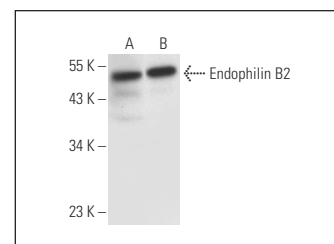
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



Endophilin B2 (A-10): sc-365608. Western blot analysis of Endophilin B2 expression in HeLa (A), MCF7 (B), T-47D (C) and C6 (D) whole cell lysates.



Endophilin B2 (A-10): sc-365608. Western blot analysis of Endophilin B2 expression in U-87 MG (A) and HeLa (B) whole cell lysates.

SELECT PRODUCT CITATIONS

- Bon, C., et al. 2019. SINEUP non-coding RNAs rescue defective frataxin expression and activity in a cellular model of Friedreich's ataxia. *Nucleic Acids Res.* 47: 10728-10743.

RESEARCH USE

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