

β -taxilin (E-5): sc-398059

BACKGROUND

β -taxilin, also called MDP77, promotes nerve regeneration and may be involved in intracellular vesicle transport. Expressed predominantly in cardiac and skeletal muscle, β -taxilin binds to the coiled coil region of the syntaxin family members STX1A, STX3A and STX4A. β - and γ -taxilins, bind to the α subunit of the nascent polypeptide-associated complex (NAC) and affect its nuclear distribution, suggesting that the taxilin family is involved not only in the translational process through its interaction with NAC but also in the transcriptional process through its interaction with α NAC alone.

REFERENCES

1. Uyeda, A., et al. 2000. MDP77: a novel neurite-outgrowth-promoting protein predominantly expressed in chick muscles. *Biochem. Biophys. Res. Commun.* 269: 564-569.
2. Fujimori, K.E., et al. 2002. Regulatory expression of MDP77 protein in the skeletal and cardiac muscles. *FEBS Lett.* 529: 303-308.
3. Nogami, S., et al. 2003. Interaction of taxilin with syntaxin which does not form the SNARE complex. *Biochem. Biophys. Res. Commun.* 311: 797-802.
4. Nogami, S., et al. 2003. Taxilin; a novel syntaxin-binding protein that is involved in Ca^{2+} -dependent exocytosis in neuroendocrine cells. *Genes Cells* 8: 17-28.
5. Nogami, S., et al. 2004. Identification and characterization of taxilin isoforms. *Biochem. Biophys. Res. Commun.* 319: 936-943.
6. Itoh, S., et al. 2004. Muscle-specific protein MDP77 specifically promotes motor nerve regeneration in rats. *Neurosci. Lett.* 360: 175-177.

CHROMOSOMAL LOCATION

Genetic locus: Txlnb (mouse) mapping to 10 A2.

SOURCE

β -taxilin (E-5) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 643-678 at the C-terminus of β -taxilin of mouse origin.

PRODUCT

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

β -taxilin (E-5) is available conjugated to agarose (sc-398059 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398059 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398059 PE), fluorescein (sc-398059 FITC), Alexa Fluor[®] 488 (sc-398059 AF488), Alexa Fluor[®] 546 (sc-398059 AF546), Alexa Fluor[®] 594 (sc-398059 AF594) or Alexa Fluor[®] 647 (sc-398059 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-398059 AF680) or Alexa Fluor[®] 790 (sc-398059 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-398059 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

β -taxilin (E-5) is recommended for detection of β -taxilin of mouse and rat origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for β -taxilin siRNA (m): sc-61653, β -taxilin shRNA Plasmid (m): sc-61653-SH and β -taxilin shRNA (m) Lentiviral Particles: sc-61653-V.

Molecular Weight of β -taxilin: 120 kDa.

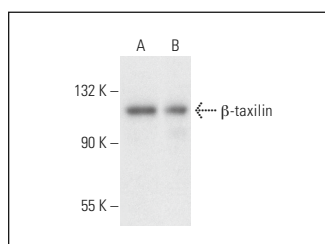
Positive Controls: Sol8 cell lysate: sc-2249 or Sol8 nuclear extract: sc-2157.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgG λ BP-HRP: sc-516132 or m-IgG λ BP-HRP (Cruz Marker): sc-516132-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-IgG λ BP-FITC: sc-516185 or m-IgG λ BP-PE: sc-516186 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



β -taxilin (E-5): sc-398059. Western blot analysis of β -taxilin expression in Sol8 whole cell lysate (A) and Sol8 nuclear extract (B).

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.

PROTOCOLS

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

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