

β -taxilin (A-5): sc-377287

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 (human) mapping to 6q24.1.

SOURCE

β -taxilin (A-5) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 495-529 near the C-terminus of β -taxilin of human origin.

PRODUCT

Each vial contains 200 μg IgG γ_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

β -taxilin (A-5) is available conjugated to agarose (sc-377287 AC), 500 μg /0.25 ml agarose in 1 ml, for IP; to HRP (sc-377287 HRP), 200 μg /ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-377287 PE), fluorescein (sc-377287 FITC), Alexa Fluor[®] 488 (sc-377287 AF488), Alexa Fluor[®] 546 (sc-377287 AF546), Alexa Fluor[®] 594 (sc-377287 AF594) or Alexa Fluor[®] 647 (sc-377287 AF647), 200 μg /ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-377287 AF680) or Alexa Fluor[®] 790 (sc-377287 AF790), 200 μg /ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-377287 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

β -taxilin (A-5) is recommended for detection of β -taxilin of 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).

Suitable for use as control antibody for β -taxilin siRNA (h): sc-61651, β -taxilin shRNA Plasmid (h): sc-61651-SH and β -taxilin shRNA (h) Lentiviral Particles: sc-61651-V.

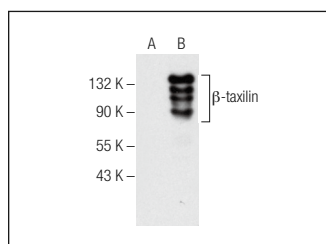
Molecular Weight of β -taxilin: 120 kDa.

Positive Controls: β -taxilin (h3): 293T Lysate: sc-129920.

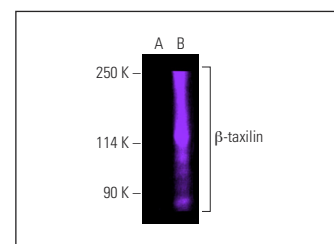
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ 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



β -taxilin (A-5): sc-377287. Western blot analysis of β -taxilin expression in non-transfected: sc-117752 (A) and human β -taxilin transfected: sc-129920 (B) 293T whole cell lysates.



β -taxilin (A-5): sc-377287. Near-Infrared western blot analysis of β -taxilin expression in non-transfected: sc-117752 (A) and human β -taxilin transfected: sc-129920 (B) 293T whole cell lysates. Blocked with UltraCruz[®] Blocking Reagent: sc-516214. Detection reagent used: m-IgG κ BP-CFL 790: sc-516181.

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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