

α -taxilin (B-9): sc-166464

BACKGROUND

α -taxilin is a novel binding partner of the Syntaxin family which is implicated in intracellular vesicle trafficking. Through its C-terminal coiled-coil region, α -taxilin interacts with the nascent polypeptide-associated complex (NAC), which acts as a transcriptional co-activator. Although α -taxilin binds to both the α and β NAC subunits, the main interaction is through α NAC. Coexpression of α -taxilin with overexpressed α NAC eliminates the nuclear distribution of α NAC, originally distributed throughout the cytosol and nucleus. β - and γ -taxilins, additional members of the taxilin family, bind to α 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. Nogami, S., Satoh, S., Nakano, M., Terano, A. and Shirataki, H. 2003. Interaction of taxilin with syntaxin which does not form the SNARE complex. *Biochem. Biophys. Res. Commun.* 311: 797-802.
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3. Nogami, S., Satoh, S., Tanaka-Nakadate, S., Yoshida, K., Nakano, M., Terano, A. and Shirataki, H. 2004. Identification and characterization of taxilin isoforms. *Biochem. Biophys. Res. Commun.* 319: 936-943.
4. Yoshida, K., Nogami, S., Satoh, S., Tanaka-Nakadate, S., Hiraishi, H., Terano, A. and Shirataki, H. 2005. Interaction of the taxilin family with the nascent polypeptide-associated complex that is involved in the transcriptional and translational processes. *Genes Cells* 10: 465-476.
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CHROMOSOMAL LOCATION

Genetic locus: TXLNA (human) mapping to 1p35.1; Txlna (mouse) mapping to 4 D2.2.

SOURCE

α -taxilin (B-9) is a mouse monoclonal antibody raised against amino acids 481-554 mapping at the C-terminus of α -taxilin of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

α -taxilin (B-9) is recommended for detection of α -taxilin of mouse, rat and human 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 α -taxilin siRNA (h): sc-39644, α -taxilin siRNA (m): sc-44830, α -taxilin shRNA Plasmid (h): sc-39644-SH, α -taxilin shRNA Plasmid (m): sc-44830-SH, α -taxilin shRNA (h) Lentiviral Particles: sc-39644-V and α -taxilin shRNA (m) Lentiviral Particles: sc-44830-V.

Molecular Weight (predicted) of α -taxilin: 62 kDa.

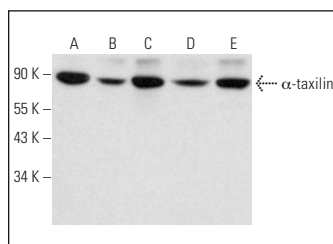
Molecular Weight (observed) of α -taxilin: 72 kDa.

Positive Controls: c4 whole cell lysate: sc-364186, NIH/3T3 whole cell lysate: sc-2210 or EOC 20 whole cell lysate: sc-364187.

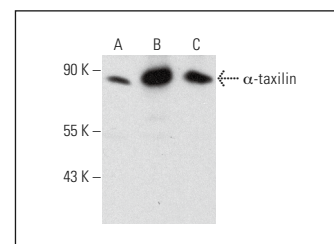
RECOMMENDED SUPPORT REAGENTS

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



α -taxilin (B-9): sc-166464. Western blot analysis of α -taxilin expression in BC₃H1 (A), Sol8 (B), C2C12 (C), A-10 (D) and C6 (E) whole cell lysates.



α -taxilin (B-9): sc-166464. Western blot analysis of α -taxilin expression in EOC 20 (A), NIH/3T3 (B) and c4 (C) 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.