

# $\alpha$ -taxilin (A-6): sc-166648

## BACKGROUND

$\alpha$ -taxilin is a novel binding partner of the Syntaxin family which is implicated in intracellular vesicle trafficking. Through its C-terminal coiled-coil region,  $\alpha$ -taxilin interacts with the nascent polypeptide-associated complex (NAC), which acts as a transcriptional coactivator. Although  $\alpha$ -taxilin binds to both the  $\alpha$  and  $\beta$  NAC subunits, the main interaction is through  $\alpha$ NAC. Coexpression of  $\alpha$ -taxilin with overexpressed  $\alpha$ NAC eliminates the nuclear distribution of  $\alpha$ NAC, originally distributed throughout the cytosol and nucleus.  $\beta$ - and  $\gamma$ -taxilins, additional members of the taxilin family, bind to  $\alpha$ 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  $\alpha$ NAC alone.

## REFERENCES

- 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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- 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.
- 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.
- Malyala, A., Kelly, M.J. and Rønnekleiv, O.K. 2005. Estrogen modulation of hypothalamic neurons: activation of multiple signaling pathways and gene expression changes. *Steroids* 70: 397-406.

## CHROMOSOMAL LOCATION

Genetic locus: Txlna (mouse) mapping to 4 D2.2.

## SOURCE

$\alpha$ -taxilin (A-6) is a mouse monoclonal antibody raised against amino acids 481-554 mapping at the C-terminus of  $\alpha$ -taxilin of mouse origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>3</sub> 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.

## RESEARCH USE

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

## APPLICATIONS

$\alpha$ -taxilin (A-6) is recommended for detection of  $\alpha$ -taxilin of mouse and rat origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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  $\alpha$ -taxilin siRNA (m): sc-44830,  $\alpha$ -taxilin shRNA Plasmid (m): sc-44830-SH and  $\alpha$ -taxilin shRNA (m) Lentiviral Particles: sc-44830-V.

Molecular Weight (predicted) of  $\alpha$ -taxilin: 62 kDa.

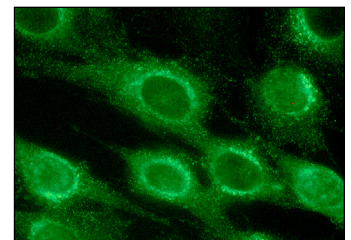
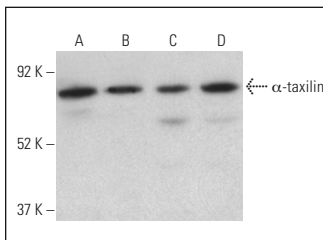
Molecular Weight (observed) of  $\alpha$ -taxilin: 72 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, BW5147 cell lysate: sc-3800 or c4 whole cell lysate: sc-364186.

## RECOMMENDED SUPPORT REAGENTS

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



$\alpha$ -taxilin (A-6): sc-166648. Western blot analysis of  $\alpha$ -taxilin expression in BW5147 (A), c4 (B), I-11.15 (C) and NIH/3T3 (D) whole cell lysates. Detection reagent used: m-IgG $\kappa$  BP-HRP: sc-533670.

$\alpha$ -taxilin (A-6): sc-166648. Immunofluorescence staining of methanol-fixed NIH/3T3 cells showing cytoplasmic localization.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.