# α-taxilin (E-14): sc-46742



The Power to Question

#### **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 co-activator. 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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- 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.
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- Malyala, A., Kelly, M.J. and Ronnekleiv, 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: TXLN (human) mapping to 1p35.1; Txlna (mouse) mapping to 4 D2.2.

# **SOURCE**

 $\alpha$ -taxilin (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of  $\alpha$ -taxilin of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-46742 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **STORAGE**

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

#### **APPLICATIONS**

 $\alpha$ -taxilin (E-14) is recommended for detection of  $\alpha$ -taxilin of human and, to a lesser extent, mouse origin by Western Blotting (starting dilution 1:200, 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 (h): sc-39644,  $\alpha$ -taxilin siRNA (m): sc-44830,  $\alpha$ -taxilin shRNA Plasmid (h): sc-39644-SH,  $\alpha$ -taxilin shRNA Plasmid (m): sc-44830-SH,  $\alpha$ -taxilin shRNA (h) Lentiviral Particles: sc-39644-V and  $\alpha$ -taxilin shRNA (m) Lentiviral Particles: sc-44830-V.

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

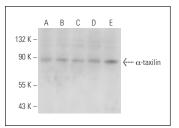
Molecular Weight (observed) of  $\alpha$ -taxilin: 72 kDa.

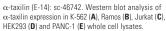
Positive Controls: α-taxilin (h): 293T Lysate: sc-127875, Jurkat whole cell lysate: sc-2204 or K-562 whole cell lysate: sc-2203.

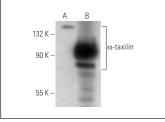
#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA







 $\alpha$ -taxilin (E-14): sc-46742. Western blot analysis of  $\alpha$ -taxilin expression in non-transfected: sc-117752 (**A**) and human  $\alpha$ -taxilin transfected: sc-127875 (**B**) 293T whole cell lysates.

### **RESEARCH USE**

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



Try  $\alpha$ -taxilin (E-2): sc-271783 or  $\alpha$ -taxilin (A-6): sc-166648, our highly recommended monoclonal aternatives to  $\alpha$ -taxilin (E-14).