

# $\gamma$ -taxilin (F-4): sc-393721



The Power to Question

## BACKGROUND

$\gamma$ -taxilin (also called lipopolysaccharide-specific response protein 5) is ubiquitously expressed, with an especially high level of expression in heart and skeletal muscle.  $\gamma$ -taxilin displays known expression in brain, placenta, lung, liver, kidney and pancreas. Taxilin family members  $\beta$ - and  $\gamma$ -taxilin bind to the  $\alpha$  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 aNAC alone.

## REFERENCES

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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.
5. 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.
6. Yu, V.W., Gauthier, C. and St-Arnaud, R. 2006. Inhibition of ATF4 transcriptional activity by FIAT/ $\gamma$ -taxilin modulates bone mass accrual. *Ann. N.Y. Acad. Sci.* 1068: 131-142.

## CHROMOSOMAL LOCATION

Genetic locus: TXLNG (human) mapping to Xp22.2; Txlng (mouse) mapping to X F4.

## SOURCE

$\gamma$ -taxilin (F-4) is a mouse monoclonal antibody raised against amino acids 49-136 mapping near the N-terminus of  $\gamma$ -taxilin of human origin.

## PRODUCT

Each vial contains 200  $\mu\text{g}$  IgM 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

$\gamma$ -taxilin (F-4) is recommended for detection of  $\gamma$ -taxilin of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu\text{g}$  per 100-500  $\mu\text{g}$  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  $\gamma$ -taxilin siRNA (h): sc-61650,  $\gamma$ -taxilin siRNA (m): sc-61652,  $\gamma$ -taxilin shRNA Plasmid (h): sc-61650-SH,  $\gamma$ -taxilin shRNA Plasmid (m): sc-61652-SH,  $\gamma$ -taxilin shRNA (h) Lentiviral Particles: sc-61650-V and  $\gamma$ -taxilin shRNA (m) Lentiviral Particles: sc-61652-V.

Molecular Weight of  $\gamma$ -taxilin: 70 kDa.

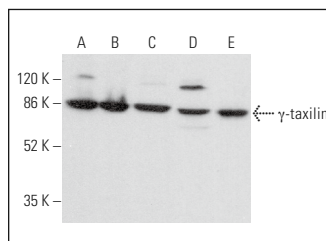
Positive Controls: HeLa nuclear extract: sc-2120, MCF7 nuclear extract: sc-2149 or SW480 nuclear extract: sc-2155.

## RECOMMENDED SUPPORT REAGENTS

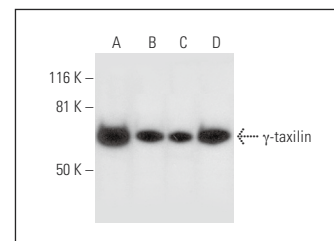
To ensure optimal results, the following support reagents are recommended:

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 L-Agarose: sc-2336 (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



$\gamma$ -taxilin (F-4): sc-393721. Western blot analysis of  $\gamma$ -taxilin expression in HeLa nuclear extract (A) and NTERA-2 cl.D1 (B), U-251-MG (C), F9 (D) and PC-12 (E) whole cell lysates.



$\gamma$ -taxilin (F-4): sc-393721. Western blot analysis of  $\gamma$ -taxilin expression in HeLa (A), MCF7 (B), SW480 (C) and A-431 (D) nuclear extracts.

## RESEARCH USE

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

## PROTOCOLS

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