

γ -taxilin (A-10): sc-393610

BACKGROUND

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

REFERENCES

1. Nogami, S., et al. 2003. Interaction of taxilin with syntaxin which does not form the SNARE complex. *Biochem. Biophys. Res. Commun.* 311: 797-802.
2. 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.
3. Nogami, S., et al. 2004. Identification and characterization of taxilin isoforms. *Biochem. Biophys. Res. Commun.* 319: 936-943.
4. Yoshida, K., et al. 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., et al. 2005. Estrogen modulation of hypothalamic neurons: activation of multiple signaling pathways and gene expression changes. *Steroids* 70: 397-406.
6. Yu, V.W., et al. 2006. Inhibition of ATF4 transcriptional activity by FIAT/ γ -taxilin modulates bone mass accrual. *Ann. N.Y. Acad. Sci.* 1068: 131-142.

CHROMOSOMAL LOCATION

Genetic locus: TXLNG (human) mapping to Xp22.2.

SOURCE

γ -taxilin (A-10) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 55-78 near the N-terminus of γ -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.

Blocking peptide available for competition studies, sc-393610 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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

γ -taxilin (A-10) is recommended for detection of γ -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), immunohistochemistry (including paraffin-embedded sections) (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 γ -taxilin siRNA (h): sc-61650, γ -taxilin shRNA Plasmid (h): sc-61650-SH and γ -taxilin shRNA (h) Lentiviral Particles: sc-61650-V.

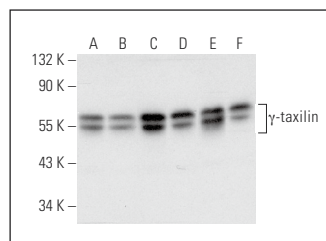
Molecular Weight of γ -taxilin: 70 kDa.

Positive Controls: MCF7 nuclear extract: sc-2149, HeLa nuclear extract: sc-2120 or HeLa whole cell lysate: sc-2200.

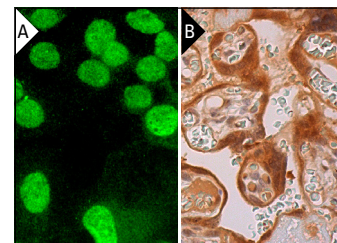
RECOMMENDED SUPPORT REAGENTS

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. 4) Immunohistochemistry: use m-IgG κ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



γ -taxilin (A-10): sc-393610. Western blot analysis of γ -taxilin expression in HeLa (A) and MCF7 (B) whole cell lysates and HeLa (C), MCF7 (D), SW480 (E) and A-431 (F) nuclear extracts.



γ -taxilin (A-10): sc-393610. Immunofluorescence staining of methanol-fixed Hep G2 cells showing nuclear localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing nuclear and cytoplasmic staining of trophoblastic cells (B).

SELECT PRODUCT CITATIONS

1. Hotokezaka, Y., et al. 2020. ATM-associated signalling triggers the unfolded protein response and cell death in response to stress. *Commun. Biol.* 3: 378.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.