# β-taxilin (h3): 293T Lysate: sc-129920



The Power to Question

# **BACKGROUND**

 $\beta$ -taxilin, also called MDP77, promotes nerve regeneration and may be involved in intracellular vesicle transport. Expressed predominantly in cardiac and skeletal muscle,  $\beta$ -taxilin binds to the coiled coil region of the syntaxin family members STX1A, STX3A and STX4A.  $\beta$ - and  $\gamma$ -taxilins, 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  $\alpha$ NAC alone.

# REFERENCES

- Uyeda, A. Fukui, I, Fujimori, K., Kiyosue, K., Nishimune, H., Kasai, M. and Taguchi T. 2000. MDP77: a novel neurite-outgrowth-promoting protein predominantly expressed in chick muscles. Biochem. Biophys. Res. Commun. 269: 564-569.
- Fujimori, K.E., Uyeda, A. and Taguchi, T.I. 2002. Regulatory expression of MDP77 protein in the skeletal and cardiac muscles. FEBS Lett. 529: 303-308.
- 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.
- Nogami, S., Satoh, S., Nakano, M., Shimizu, H., Fukushima, H., Maruyama, A., Terano, A. and Shirataki, H. 2003. Taxilin; a novel syntaxin-binding protein that is involved in Ca<sup>2+</sup>-dependent exocytosis in neuroendocrine cells. Genes Cells 8: 17-28.
- Nogami, S., Satoh, S., Tanaka-Nakadate, S., Yoshida, K., Nakano, M., Terano, A. and Shirataki, H.I. 2004. Identification and characterization of taxilin isoforms. Biochem. Biophys. Res. Commun. 319: 936-943.
- Itoh, S., Uyeda, A., Hukuoka, Y., Fujimori, K.E., Matsuda, A., Ichinose, S., Kobayashi, H., Shinomiya, K., Tanaka, J. and Taguchi, T. 2004. Musclespecific protein MDP77 specifically promotes motor nerve regeneration in rats. Neurosci. Lett. 360: 175-177.
- 7. 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.
- 8. 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.
- 9. Itoh, S., Fujimori, K.E., Uyeda, A., Matsuda, A., Kobayashi, H., Shinomiya, K., Tanaka, J. and Taguchi, T. 2005. Long-term effects of muscle-derived protein with molecular mass of 77 kDa (MDP77) on nerve regeneration. J. Neurosci. Res. 81: 730-738.

# **CHROMOSOMAL LOCATION**

Genetic locus: TXLNB (human) mapping to 6q24.1.

# **PRODUCT**

 $\beta$ -taxilin (h3): 293T Lysate represents a lysate of human  $\beta$ -taxilin transfected 293T cells and is provided as 100 μg protein in 200 μl SDS-PAGE buffer.

# **APPLICATIONS**

 $\beta$ -taxilin (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive  $\beta$ -taxilin antibodies. Recommended use: 10-20  $\mu$ l per lane

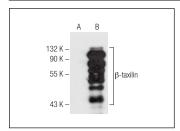
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

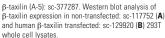
 $\beta$ -taxilin (A-5): sc-377287 is recommended as a positive control antibody for Western Blot analysis of enhanced human  $\beta$ -taxilin expression in  $\beta$ -taxilin transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

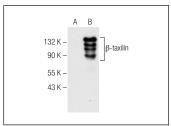
# **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

#### DATA







 $\beta$ -taxilin (A-5): sc-377287. Western blot analysis of  $\beta$ -taxilin expression in non-transfected: sc-117752 (**A**) and human  $\beta$ -taxilin transfected: sc-129920 (**B**) 293T whole cell lysates.

# **STORAGE**

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

# **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.