

MAST1 (h): 293T Lysate: sc-114725

BACKGROUND

Syntrophin is an adapter protein that functions to bind certain signaling molecules to the dystrophin-associated protein complex. This complex connects the extracellular matrix to the intracellular cytoskeleton for construction and maintenance of the postsynaptic structures in the neuromuscular junction and the central nervous system. Microtubule-associated serine/threonine-protein kinase 1 (MAST1) is a member of the microtubule-associated serine/threonine kinase family and is involved in linking the dystrophin/utrophin network with microtubule filaments via Syntrophin.

REFERENCES

1. Lumeng, C., Phelps, S., Crawford, G.E., Walden, P.D., Barald, K. and Chamberlain, J.S. 1999. Interactions between β 2-Syntrophin and a family of microtubule-associated serine/threonine kinases. *Nat. Neurosci.* 2: 611-617.
2. Yano, R., Yap, C.C., Yamazaki, Y., Muto, Y., Kishida, H., Okada, D. and Hashikawa, T. 2003. Sast124, a novel splice variant of Syntrophin-associated serine/threonine kinase (SAST), is specifically localized in the restricted brain regions. *Neuroscience* 117: 373-381.
3. Valiente, M., Andrés-Pons, A., Gomar, B., Torres, J., Gil, A., Tapparel, C., Antonarakis, S.E. and Pulido, R. 2005. Binding of PTEN to specific PDZ domains contributes to PTEN protein stability and phosphorylation by microtubule-associated serine/threonine kinases. *J. Biol. Chem.* 280: 28936-28943.
4. Sun, L., Gu, S., Li, X., Sun, Y., Zheng, D., Yu, K., Ji, C., Tang, R., Xie, Y. and Mao, Y. 2006. Identification of a novel human MAST4 gene, a new member of the microtubule associated serine-threonine kinase family. *Mol. Biol.* 40: 808-815.
5. De Angelis, P.M., Svendsrud, D.H., Kravik, K.L. and Stokke, T. 2006. Cellular response to 5-fluorouracil (5-FU) in 5-FU-resistant colon cancer cell lines during treatment and recovery. *Mol. Cancer* 5: 20.

CHROMOSOMAL LOCATION

Genetic locus: MAST1 (human) mapping to 19p13.2.

PRODUCT

MAST1 (h): 293T Lysate represents a lysate of human MAST1 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

MAST1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive MAST1 antibodies. Recommended use: 10-20 μ l per lane.

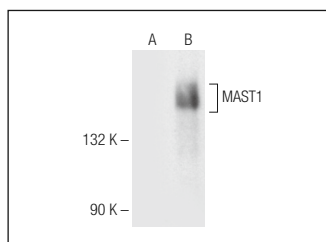
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

MAST1 (G-4): sc-373845 is recommended as a positive control antibody for Western Blot analysis of enhanced human MAST1 expression in MAST1 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-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.

DATA



MAST1 (G-4): sc-373845. Western blot analysis of MAST1 expression in non-transfected: sc-117752 (A) and human MAST1 transfected: sc-114725 (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.