



PPX (m): 293T Lysate: sc-127375

BACKGROUND

In eukaryotes, the phosphorylation and dephosphorylation of proteins on serine and threonine residues is an essential means of regulating a broad range of cellular functions, including division, homeostasis and apoptosis. A group of proteins that are intimately involved in this process are the protein phosphatases. In general, the protein phosphatase (PP) holoenzyme is a trimeric complex composed of a regulatory subunit, a variable subunit and a catalytic subunit. Four major families of protein phosphatase catalytic subunits have been identified, designated PP1, PP2A, PP2B (calcineurin) and PP2C. An additional protein phosphatase catalytic subunit, PPX (also known as PP4) is a putative member of a novel PP family.

REFERENCES

1. Ueki, K., Muramatsu, T. and Kincaid, R.L. 1992. Structure and expression of two isoforms of the murine calmodulin-dependent protein phosphatase regulatory subunit (calcineurin B). *Biochem. Biophys. Res. Commun.* 187: 537-543.
2. Cohen, P.T. 1993. Important roles for novel protein phosphatases dephosphorylating serine and threonine residues. *Biochem. Soc. Trans.* 21: 884-888.
3. Hendrix, P., Mayer-Jackel, R.E., Cron, P., Goris, J., Hofsteenge, J., Merlevede, W. and Hemmings, B.A. 1993. Structure and expression of a 72 kDa regulatory subunit of protein phosphatase 2A. Evidence for different size forms produced by alternative splicing. *J. Biol. Chem.* 268: 15267-15276.
4. Mumby, M.C. and Walter, G. 1993. Protein serine/threonine phosphatases: structure, regulation and functions in cell growth. *Phys. Rev.* 73: 673-699.
5. Okubo, S., Ito, M., Takashiba, Y., Ichikawa, K., Miyahara, M., Shimizu, H., Konishi, T., Shima, H., Nagao, M. and Hatshorne, D.J. 1994. A regulatory subunit of smooth muscle Myosin bound phosphatase. *Biochem. Biophys. Res. Commun.* 200: 429-434.
6. Wera, S. and Hemmings, B.A. 1995. Serine/threonine protein phosphatases. *Biochem. J.* 311: 17-29.
7. Van Eynde, A., Wera, S., Beullens, M., Torrekens, S., Van Leuven, F., Stalmans, W. and Bollen, M. 1995. Molecular cloning of NIPP-1, a nuclear inhibitor of protein phosphatase-1, reveals homology with polypeptides involved in RNA processing. *J. Biol. Chem.* 270: 28068-28074.

CHROMOSOMAL LOCATION

Genetic locus: Ppp4c (mouse) mapping to 7 F3.

PRODUCT

PPX (m): 293T Lysate represents a lysate of mouse PPX transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

PPX (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive PPX antibodies. Recommended use: 10-20 µl per lane.

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

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.