SANTA CRUZ BIOTECHNOLOGY, INC.

PP2B-B2 (MH-94): sc-134423



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 and PP2C. An additional protein phosphatase catalytic subunit, PPX (also known as PP4), is a putative member of a novel PP family. The PP2B family comprises subfamily members PP2B-A α , PP2B-A β and PP2B-A γ . Two additional regulatory subunits been identified, designated PP2B-B1 and PP2B-B2.

REFERENCES

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- Hendrix, P., et al. 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.
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- Van Eynde, A., et al. 1995. Molecular cloning of NIPP1, a nuclear inhibitor of protein phosphatase-1, reveals homology with polypeptides involved in RNA processing. J. Biol. Chem. 270: 28068-28074.
- Liu, L., et al. 2005. Characterization of a human regulatory subunit of protein phosphatase 3 gene (PPP3RL) expressed specifically in testis. Mol. Biol. Rep. 32: 41-45.

CHROMOSOMAL LOCATION

Genetic locus: PPP3R2 (human) mapping to 9q31.1.

SOURCE

PP2B-B2 (MH-94) is a mouse monoclonal antibody raised against recombinant PP2B-B2 protein of human origin.

PRODUCT

Each vial contains 100 μg lgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

PP2B-B2 (MH-94) is recommended for detection of PP2B-B2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PP2B-B2 siRNA (h): sc-92568, PP2B-B2 shRNA Plasmid (h): sc-92568-SH and PP2B-B2 shRNA (h) Lenti-viral Particles: sc-92568-V.

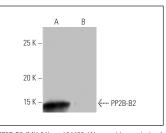
Molecular Weight of PP2B-B2: 21 kDa.

Positive Controls: human PP2B-B2 transfected 293T whole cell lysate.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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).

DATA



PP2B-B2 (MH-94): sc-134423. Western blot analysis of PP2B-B2 expression in human PP2B-B2 transfected (A) and non-transfected (B) 293T whole cell lysates.

STORAGE

Store at 4° C, **D0 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.

PROTOCOLS

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