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SANTA CRUZ BIOTECHNOLOGY, INC.

PP2A-Cα (m2): 293T Lysate: sc-125848

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. The PP2A family comprises subfamily members PP2Aα and PP2Aβ. The PP2A catalytic subunit associates with a variety of regulatory subunits. Regulatory subunits include PP2A-Aα and -Aβ, PP2A-Bα and -Bβ, PP2A-Cα and -Cβ, and PP2A-B56-α and -B56-β.

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CHROMOSOMAL LOCATION

Genetic locus: Ppp2ca (mouse) mapping to 11 B1.3.

PRODUCT

PP2A-Cα (m2): 293T Lysate represents a lysate of mouse PP2A-Cα transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

PP2A-Cα (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive PP2A-Cα antibodies. Recommended use: 10-20 µl per lane.

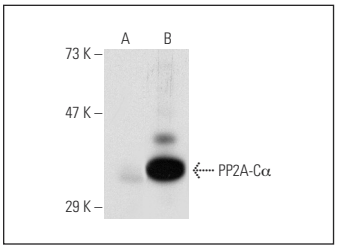
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

PP2A-Cα/β (1D6): sc-80665 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse PP2A-Cα expression in PP2A-Cα transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

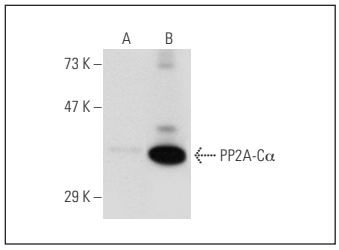
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-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.

DATA



PP2A-Cα/β (1D6): sc-80665. Western blot analysis of PP2Aα expression in non-transfected: sc-117752 (**A**) and mouse PP2A-Cα transfected: sc-125848 (**B**) 293T whole cell lysates.



demethylated-PP2A-C (4B7): sc-13601. Western blot analysis of PP2A-Cα expression in non-transfected: sc-117752 (**A**) and mouse PP2A-Cα transfected: sc-125848 (**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.