

PP2C β (P-13): sc-50855

BACKGROUND

Eukaryotic protein phosphorylation and dephosphorylation on serine and threonine residues regulates numerous cell functions, including division, homeostasis and apoptosis. A group of proteins that play a major role in this process are the serine/threonine protein phosphatases. Protein phosphatase (PP) holoenzyme is a trimeric complex that contains a regulatory subunit, a variable subunit and a catalytic subunit. PP2C family members are negative regulators of cell stress response pathways. The PP2C β enzyme has broad specificity and is highly expressed in the heart and skeletal muscle. It may be involved in cell cycle control as it dephosphorylates the cyclin-dependent kinases (CDKs), CDK2 and CDK6, *in vitro*. Overexpression of PP2C β can cause cell-growth arrest or cell death.

CHROMOSOMAL LOCATION

Genetic locus: PPM1B (human) mapping to 2p21; Ppm1b (mouse) mapping to 17 E4.

SOURCE

PP2C β (P-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PP2C β of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-50855 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

PP2C β (P-13) is recommended for detection of PP2C β of mouse, rat and 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PP2C β siRNA (h): sc-61387, PP2C β siRNA (m): sc-61389, PP2C β shRNA Plasmid (h): sc-61387-SH, PP2C β shRNA Plasmid (m): sc-61389-SH, PP2C β shRNA (h) Lentiviral Particles: sc-61387-V and PP2C β shRNA (m) Lentiviral Particles: sc-61389-V.

Molecular Weight of PP2C β isoform 1: 53 kDa.

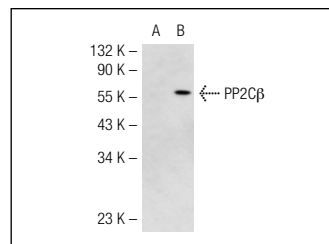
Molecular Weight of PP2C β isoform 2: 43 kDa.

Positive Controls: PP2C β (h2): 293T Lysate: sc-116891, PP2C β (m): 293T Lysate: sc-122721 or HeLa whole cell lysate: sc-2200.

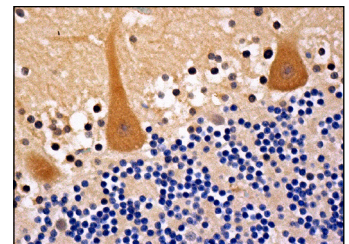
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



PP2C β (P-13): sc-50855. Western blot analysis of PP2C β expression in non-transfected: sc-117752 (A) and mouse PP2C β transfected: sc-122721 (B) 293T whole cell lysates.



PP2C β (P-13): sc-50855. Immunoperoxidase staining of formalin fixed, paraffin-embedded human cerebellum tissue showing cytoplasmic staining of Purkinje cells, cells in granular layer and cells in molecular layer.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

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

MONOS
Satisfaction
Guaranteed

Try **PP2C α / β (D-8): sc-166662** or **PP2C β (k1B1): sc-134219**, our highly recommended monoclonal alternatives to PP2C β (P-13).