**PP2A-Cα/β (1D6): sc-80665**

**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 PP2Aαc and PP2Aβ. The PP2A catalytic subunit associates with a variety of regulatory subunits. Regulatory subunits include PP2A-αc and -Aβ, PP2A-βc and -Bβ, PP2A-αc and -Bβ, and PP2A-β65α and -B56β.

**CHROMOSOMAL LOCATION**

Genetic locus: PPP2CA (human) mapping to 5q31.1, PPP2CB (human) mapping to 8p12; Ppp2ca (mouse) mapping to 11 B1.3, Ppp2cb (mouse) mapping to B A4.

**SOURCE**

PP2A-Cα/β (1D6) is a mouse monoclonal antibody raised against amino acids 295-309 of PP2A-Cα/β of human PP2A.

**PRODUCT**

Each vial contains 100 µg IgG2a, kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

PP2A-Cα/β (1D6) is available conjugated to agarose (sc-80665 AC), 500 µg/0.25 ml agarose in 1 ml for IP; to HRP (sc-80665 HRP), 200 µg/ml, for WB, HCP and ELISA; to either phycocyanin (sc-80665 PE), fluorescein (sc-80665 FITC), Alexa Fluor® 488 (sc-80665 AF488), Alexa Fluor® 546 (sc-80665 AF546), Alexa Fluor® 594 (sc-80665 AF594) or Alexa Fluor® 647 (sc-80665 AF647), 200 µg/ml, for WB (RGB), IF, HCP and FCM; and to either Alexa Fluor® 680 (sc-80665 AF680) or Alexa Fluor® 790 (sc-80665 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**APPLICATIONS**

PP2A-Cα/β (1D6) is recommended for detection of PP2A-Cα/β of mouse, rat, human, bovine, porcine, canine and zebrafish origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg of total protein (1 ml of cell lysates)), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500); to demethylate, treat with 100mM NaOH on ice. Molecular Weight of PP2A-Cα/β: 36 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A-673 cell lysate: sc-2414 or MCF7 whole cell lysate: sc-2206.

**STORAGE**

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

**DATA**

PP2A-Cα/β (1D6) HRP: sc-80665 HRP: Direct western blot analysis of PP2A-Cα/β expression in NIH/3T3 (A), 93 7E (B), MCF7 (C), HeLa (D), U-937 (E) and Hep G2 (F) whole cell lysates.

**SELECT PRODUCT CITATIONS**


**PROTOCOLS**

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