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 PP2A-α and PP2A-β. The PP2A catalytic subunit associates with a variety of regulatory subunits. Regulatory subunits include PP2A-A-α, PP2A-A-β, PP2A-B-α, PP2A-B-β, PP2A-C-α, PP2A-C-β, PP2A-B56-α, PP2A-B56-β, PP2A-B56-γ and PP2A-B56-δ.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: PPP2RSA (human) mapping to 1q32.3; Ppp2zsa (mouse) mapping to 1H6.

SOURCE

PP2A-B56-α (23) is a mouse monoclonal antibody raised against amino acids 1-162 of PP2A-B56-α of human origin.

PRODUCT

Each vial contains 50 µg IgG1 in 0.5 ml PBS with <0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4°C, **DO 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.

APPLICATIONS

PP2A-B56-α (23) is recommended for detection of PP2A-B56-α of mouse, rat, human and canine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500); not recommended for immunoprecipitation.


Molecular Weight of PP2A-B56-α: 56 kDa.

Positive Controls: A-10 cell lysate: sc-3806 or C2C12 whole cell lysate: sc-364188.

DATA

PP2A-B56-α (23): sc-136045. Western blot analysis of PP2A-B56-α expression in C2C12 (A) and A-10 (B) whole cell lysates.

SELECT PRODUCT CITATIONS


PROTOCOLS

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