

PPP1R6 (C-15): sc-85834

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. PPP1R6 (protein phosphatase 1, regulatory subunit 6), also known as PPP1R3D in humans and Ppp1r3d in rodents, is a 299 amino acid protein that contains one CBM21 (carbohydrate binding type-21) domain and exists as a regulatory subunit of the PP1 holoenzyme. Expressed ubiquitously with highest expression in heart and skeletal muscle, PPP1R6 functions as a glycogen-targeting subunit of PP1 and participates in cell division, glycogen metabolism and protein synthesis.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PPP1R3D (human) mapping to 20q13.33; Ppp1r3d (mouse) mapping to 2 H4.

SOURCE

PPP1R6 (C-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of PPP1R6 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-85834 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PPP1R6 (C-15) is recommended for detection of PPP1R6 of human origin and Ppp1r3d of mouse and rat 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 lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with PPP1R4.

PPP1R6 (C-15) is also recommended for detection of PPP1R6 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PPP1R6 siRNA (h): sc-76209, Ppp1r3d siRNA (m): sc-152421, PPP1R6 shRNA Plasmid (h): sc-76209-SH, Ppp1r3d shRNA Plasmid (m): sc-152421-SH, PPP1R6 shRNA (h) Lentiviral Particles: sc-76209-V and Ppp1r3d shRNA (m) Lentiviral Particles: sc-152421-V.

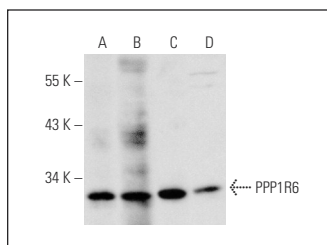
Molecular Weight of PPP1R6: 33 kDa.

Positive Controls: mouse heart extract: sc-2254, mouse brain extract: sc-2253 or mouse testis extract: sc-2405.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



PPP1R6 (C-15): sc-85834. Western blot analysis of PPP1R6 expression in mouse brain (A), mouse heart (B) and mouse testis (C) tissue extracts and PC-12 whole cell lysate (D).

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.