# SANTA CRUZ BIOTECHNOLOGY, INC.

# PP2A-B56-δ (T-12): sc-107958



## 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 subunit 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 $\alpha$  and PP2A $\beta$ . The PP2A catalytic subunit associates with a variety of regulatory subunits. Regulatory subunits include PP2A-A- $\alpha$  and -A- $\beta$ , PP2A-B- $\alpha$  and -B- $\beta$ , PP2A-C- $\alpha$  and -C- $\beta$ , PP2A-B56- $\alpha$ , -B56- $\beta$ , -B56- $\gamma$  and -B56- $\delta$ .

# CHROMOSOMAL LOCATION

Genetic locus: PPP2R5D (human) mapping to 6p21.1; Ppp2r5d (mouse) mapping to 17 C.

## SOURCE

PP2A-B56- $\delta$  (T-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PP2A-B56- $\delta$  of human origin.

### PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-107958 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### **APPLICATIONS**

PP2A-B56-δ (T-12) is recommended for detection of PP2A-B56-δ of mouse, rat and human 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 family members PP2A-B56- $\alpha$ , PP2A-B56- $\beta$  or PP2A-B56- $\gamma$ .

PP2A-B56-& (T-12) is also recommended for detection of PP2A-B56-& in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for PP2A-B56- $\delta$  siRNA (h): sc-95565, PP2A-B56- $\delta$  siRNA (m): sc-152396, PP2A-B56- $\delta$  shRNA Plasmid (h): sc-95565-SH, PP2A-B56- $\delta$  shRNA Plasmid (m): sc-152396-SH, PP2A-B56- $\delta$ shRNA (h) Lentiviral Particles: sc-95565-V or PP2A-B56- $\delta$  shRNA (m) Lentiviral Particles: sc-152396-V.

Molecular Weight of PP2A-B56-8: 70 kDa.

Positive Controls: KNRK whole cell lysate: sc-2214, K-562 whole cell lysate: sc-2203 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.

#### DATA



PP2A-B56- $\delta$  (T-12): sc-107958. Western blot analysis of PP2A-B56- $\delta$  expression in rat skeletal muscle tissue

extract.

#### **STORAGE**

Store at 4° C, \*\*D0 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.

## PROTOCOLS

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

MONOS Satisfation Guaranteed

Try **PP2A-B56-δ (H5D12): sc-81605** or **PP2A-B56-δ** (**H-11): sc-271363**, our highly recommended monoclonal aternatives to PP2A-B56-δ (T-12).