

# I2PP2A (F-17): sc-27269

## BACKGROUND

Protein phosphatase 2A (PP2A) is a major mammalian protein serine/threonine phosphatase that regulates diverse cellular processes. Inhibitor 1 of PP2A (I1PP2A) and inhibitor 2 of PP2A (I2PP2A), which share large sequence similarity, are heat-stable protein inhibitors of the cellular phosphatase activity of PP2A. I1PP2A and I2PP2A were initially characterized as putative HLA class II associated proteins Phap I and Phap II. These inhibitor proteins act noncompetitively to selectively inhibit PP2A, but do not affect the phosphatase activity of the related proteins PP1, PP2B and PP2C. The I1PP2A protein is localized to both the cytoplasm and the nucleus. In contrast, I2PP2A is located predominantly in the nucleus and is highly expressed in Wilms' tumor cells. Transient expression of I2PP2A in HEK-293 cells leads to an increase in the DNA binding activity of the proto-oncogene c-Jun.

## REFERENCES

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- Al-Murrani, S.W., et al. 1999. Expression of I2PP2A, an inhibitor of protein phosphatase 2A, induces c-Jun and AP-1 activity. *Biochem. J.* 341: 293-298.

## CHROMOSOMAL LOCATION

Genetic locus: SET (human) mapping to 9q34.11, SETP20 (human) mapping to 4q25; Set (mouse) mapping to 2 B.

## SOURCE

I2PP2A (F-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of I2PP2A of human origin.

## STORAGE

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

## PRODUCT

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

Blocking peptide available for competition studies, sc-27269 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

I2PP2A (F-17) is recommended for detection of I2PP2A and LOC389217 of human origin and I2PP2A of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

I2PP2A (F-17) is also recommended for detection of I2PP2A and LOC389217 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for I2PP2A siRNA (m): sc-44385, I2PP2A siRNA (r): sc-106998, I2PP2A shRNA Plasmid (m): sc-44385-SH, I2PP2A shRNA Plasmid (r): sc-106998-SH, I2PP2A shRNA (m) Lentiviral Particles: sc-44385-V and I2PP2A shRNA (r) Lentiviral Particles: sc-106998-V.

Molecular Weight of I2PP2A: 39 kDa.

Positive Controls: Ramos cell lysate: sc-2216, SK-N-MC cell lysate: sc-2237 or KNRK whole cell lysate: sc-2214.

## 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) 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.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **I2PP2A (F-9): sc-133138**, our highly recommended monoclonal alternative to I2PP2A (F-17).