

# NIPP1 (C-18): sc-67702

## BACKGROUND

NIPP1 (nuclear inhibitor of protein phosphatase 1) is a putative transcription regulator that may be involved in pre-mRNA splicing and cell proliferation. NIPP1 contains a nuclear signaling region named FHA (fork-head associated) domain. The FHA domain has been associated with protein kinases and transcription factors. The NIPP1 locus encodes for three different isoforms termed  $\alpha$ ,  $\beta$  and  $\gamma$  due to alternative splicing events. The isoforms exhibit RNA binding activity and also act as phosphatase inhibitors. The  $\gamma$  isoform is believed to be a magnesium dependent endoribonuclease that is responsible for cleaving RNA strands. It is mainly found in B cells and T lymphocytes. The  $\alpha$  and  $\beta$  isoforms are localized in the brain and kidney. Inactivation of NIPP1 is accomplished by the phosphorylation of Ser 199 or Ser 204. NIPP1 interacts with proteins CDC5L, SAP 155, MELK and EED.

## REFERENCES

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7. Ammosova, T., et al. 2005. Dephosphorylation of Cdk9 by protein phosphatase 2A and protein phosphatase 1 in Tat-activated HIV-1 transcription. *Retrovirology* 2: 47.
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## CHROMOSOMAL LOCATION

Genetic locus: PPP1R8 (human) mapping to 1p35.3; Ppp1r8 (mouse) mapping to 4 D2.3.

## SOURCE

NIPP1 (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of NIPP1 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-67702 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

NIPP1 (C-18) is recommended for detection of NIPP1 of mouse, rat and human 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).

NIPP1 (C-18) is also recommended for detection of NIPP1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for NIPP1 siRNA (h): sc-62689, NIPP1 siRNA (m): sc-62690, NIPP1 shRNA Plasmid (h): sc-62689-SH, NIPP1 shRNA Plasmid (m): sc-62690-SH, NIPP1 shRNA (h) Lentiviral Particles: sc-62689-V and NIPP1 shRNA (m) Lentiviral Particles: sc-62690-V.

Molecular Weight of NIPP1: 39/41-47 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

## 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.

## 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.

## PROTOCOLS

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



Try **NIPP1 (A-11): sc-393991** or **NIPP1 (B-4): sc-271749**, our highly recommended monoclonal alternatives to NIPP1 (C-18).