# SANTA CRUZ BIOTECHNOLOGY, INC.

# NIPP1 (P-19): sc-67704



# 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 phophatase 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

- Van Eynde, A., et al. 1996. Molecular cloning of NIPP1, a nuclear inhibitor of protein phosphatase 1, reveals homology with polypeptides involved in RNA processing. J. Biol. Chem. 270: 28068-28074.
- Van Eynde, A., et al. 1999. Organization and alternate splice products of the gene encoding nuclear inhibitor of protein phosphatase 1 (NIPP1). Eur. J. Biochem. 261: 291-300.

# CHROMOSOMAL LOCATION

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

# SOURCE

NIPP1 (P-19) 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  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-67704 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

NIPP1 (P-19) 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), 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). NIPP1 (P-19) 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 kDa.

#### **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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

#### DATA



NIPP1 (P-19): sc-67704. Western blot analysis of NIPP1 expression in non-transfected:

sc-117752 (**A**) and mouse NIPP1 transfected:

sc-125708 (B) 293T whole cell lysates.

#### **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 or our catalog for detailed protocols and support products.

# MONOS Satisfation Guaranteed

Try NIPP1 (A-11): sc-393991 or NIPP1 (B-4): sc-271749, our highly recommended monoclonal alternatives to NIPP1 (P-19).