

SNIP1 (N-16): sc-47930

BACKGROUND

Members of the transforming growth factor- β (TGF- β) superfamily play critical roles in controlling cell growth and differentiation. Effects of TGF- β family ligands are mediated by Smad proteins. The Smad nuclear interacting protein (SNIP1) contains a forkhead-associated (FHA) domain and acts as a nuclear inhibitor of CBP/p300. SNIP1 potently inhibits the activity of NF κ B, which binds the C/H1 domain of CBP/p300, by competing for the binding site. SNIP1 is also thought to induce expression of Cyclin D1 to promote cellular proliferation. SNIP1 is ubiquitously expressed with high expression in heart and skeletal muscle.

REFERENCES

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- Kim, R.H., et al. 2001. SNIP1 inhibits NF κ B signaling by competing for its binding to the C/H1 domain of CBP/p300 transcriptional co-activators. *J. Biol. Chem.* 276: 46297-46304.
- Lin, Y., et al. 2002. A novel link between the proteasome pathway and the signal transduction pathway of the bone morphogenetic proteins (BMPs). *BMC Cell Biol.* 3: 15.
- Wang, T. 2003. The 26S proteasome system in the signaling pathways of TGF- β superfamily. *Front. Biosci.* 8: d1109-d1127.
- Roche, K.C., et al. 2004. The FHA domain protein SNIP1 is a regulator of the cell cycle and cyclin D1 expression. *Oncogene* 23: 8185-8195.
- Mouillet, J.F., et al. 2004. p300 regulates the synergy of steroidogenic factor-1 and early growth response-1 in activating luteinizing hormone- β subunit gene. *J. Biol. Chem.* 279: 7832-7839.

CHROMOSOMAL LOCATION

Genetic locus: SNIP1 (human) mapping to 1p34.3; Snip1 (mouse) mapping to 4 D2.2.

SOURCE

SNIP1 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of SNIP1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, Ready P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-47930 X, 200 μ g/0.1 ml.

STORAGE

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

APPLICATIONS

SNIP1 (N-16) is recommended for detection of SNIP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SNIP1 siRNA (h): sc-61581, SNIP1 siRNA (m): sc-61582, SNIP1 shRNA Plasmid (h): sc-61581-SH, SNIP1 shRNA Plasmid (m): sc-61582-SH, SNIP1 shRNA (h) Lentiviral Particles: sc-61581-V and SNIP1 shRNA (m) Lentiviral Particles: sc-61582-V.

SNIP1 (N-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

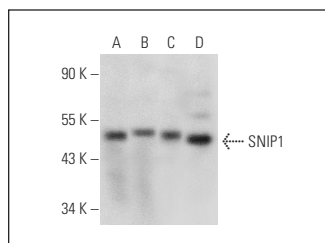
Molecular Weight of SNIP1: 46 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, HeLa whole cell lysate: sc-2200 or mouse heart extract: sc-2254.

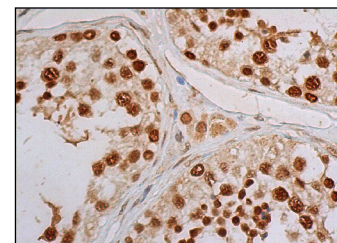
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



SNIP1 (N-16): sc-47930. Western blot analysis of SNIP1 expression in Jurkat (A), HeLa (B) and K-562 (C) whole cell lysates and mouse heart tissue extract (D).



SNIP1 (N-16): sc-47930. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing nuclear staining of cells in seminiferous ducts and Leydig cells.

RESEARCH USE

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