

SnoN (K-20): sc-9595

BACKGROUND

The Ski family of oncogenes includes Ski and Sno (Ski-related novel gene, or Ski-like). Three isoforms of human Sno (SnoN, SnoA and SnoI) and two isoforms in mouse (SnoN and SnoN2, also designated sno-dE3) are produced by alternative splicing of the SKIL gene. Ski family members are nuclear proteins that form homodimers and heterodimers, bind to DNA and function as transcriptional activators and repressors. These proteins consist of five tandem repeats in the C-terminal domain and two leucine zipper motifs that are responsible for efficient DNA binding, trimerization and cellular transformation. The Ski proteins regulate TGF β induced gene-specific transcriptional activation by effectively repressing Smad activity and, thereby, inhibit TGF β induced cell growth and extracellular matrix production. The amino-terminus of Ski and SnoN preferentially associates with the MH2 domain of Smad2 and Smad4 of the Smad family of transcription factors, where they then recruit the transcriptional corepressor protein N-CoR to the complex to inhibit transcription. Alternatively, Ski proteins are negatively regulated by various Smad proteins, as TGF β induces Smad3 accumulation in the nucleus, where it is then responsible for inducing the rapid degradation of SnoN and facilitating TGF β signaling pathways and Smad-activated gene transcription.

CHROMOSOMAL LOCATION

Genetic locus: SKIL (human) mapping to 3q26.31; Skil (mouse) mapping to 3 A3.

SOURCE

SnoN (K-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SnoN 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-9595 X, 200 μ g/0.1 ml.

Blocking peptide available for competition studies, sc-9595 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SnoN (K-20) is recommended for detection of SnoN of human and, to a lesser extent, mouse and rat 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SnoA/N siRNA (h): sc-36518, SnoA/N siRNA (m): sc-36519, SnoA/N shRNA Plasmid (h): sc-36518-SH, SnoA/N shRNA Plasmid (m): sc-36519-SH, SnoA/N shRNA (h) Lentiviral Particles: sc-36518-V and SnoA/N shRNA (m) Lentiviral Particles: sc-36519-V.

SnoN (K-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

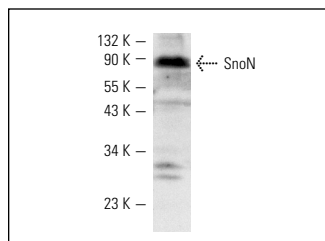
Molecular Weight of SnoN: 77 kDa.

Positive Controls: mouse brain extract: sc-2253, SJRH30 cell lysate: sc-2287 or Hep G2 cell lysate: sc-2227.

STORAGE

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

DATA



SnoN (K-20): sc-9595. Western blot analysis of SnoN expression in mouse brain extract.

SELECT PRODUCT CITATIONS

- Yang, J., et al. 2003. Hepatocyte growth factor suppresses renal interstitial myofibroblast activation and intercepts Smad signal transduction. *Am. J. Pathol.* 163: 621-632.
- Baldwin, R.L., et al. 2003. Loss of c-Myc repression coincides with ovarian cancer resistance to transforming growth factor β growth arrest independent of transforming growth factor β /Smad signaling. *Cancer Res.* 63: 1413-1439.
- Zhang, F., et al. 2003. Ski-related novel protein N (SnoN), a negative controller of transforming growth factor- β signaling, is a prognostic. *Cancer Res.* 63: 5005-5010.
- Dai, C. and Liu, Y. 2004. Hepatocyte growth factor antagonizes the profibrotic action of TGF β 1 in mesangial cells by stabilizing Smad transcriptional corepressor TGIF. *J. Am. Soc. Nephrol.* 15: 1402-1412.
- Li, Y., et al. 2007. PINCH-1 promotes tubular epithelial-to-mesenchymal transition by interacting with integrin-linked kinase. *J. Am. Soc. Nephrol.* 18: 2534-2543.
- Tone, A.A., et al. 2008. Gene expression profiles of luteal phase fallopian tube epithelium from BRCA mutation carriers resemble high-grade serous carcinoma. *Clin. Cancer Res.* 14: 4067-4078.

RESEARCH USE

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

MONOS
Satisfaction
Guaranteed

Try **SnoN (B-3): sc-136958** or **SnoN (C6): sc-133119**, our highly recommended monoclonal alternatives to SnoN (K-20).