

SnoN (368-684): sc-4439 WB

BACKGROUND

The Ski family of oncogenes includes Ski, SnoN and SnoA, which are produced by alternative splicing of the Sno 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 termini of Ski and SnoN preferentially associate with the MH2 domain of Smad2 and Smad4 of the Smad family of transcription factors, where they then recruit the transcriptional co-repressor 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.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SKIL (human) mapping to 3q26.2; Skil (mouse) mapping to 3 A3.

SOURCE

SnoN (368-684) is expressed in *E. coli* as a 62 kDa tagged fusion protein corresponding to amino acids 368-684 of SnoN of human origin.

PRODUCT

SnoN (368-684) is purified from bacterial lysates (>98%) by glutathione agarose affinity chromatography; supplied as 10 μ g in 0.1 ml SDS-PAGE loading buffer.

APPLICATIONS

SnoN (368-684) is suitable as a Western blotting control for sc-9595 and sc-9141.

STORAGE

Store at -20° C. 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.