

## Ski Antibody

*Ski: c-ski, v-ski sarcoma viral oncogene homolog*

**CATALOG No.:2259**

### BACKGROUND:

TGF- $\beta$  is a ubiquitously expressed cytokine that signals through the Smad protein family to regulate numerous cellular processes such as embryonic development and tumorigenesis (1). This signaling is negatively regulated by Ski, the mammalian homolog of the transforming protein of an avian retrovirus that induces oncogenic transformation of chicken embryo cells (2), and the related protein SnoN (3). Ski functions by binding to the Smad proteins and preventing their phosphorylation, thereby inhibiting their ability to bind DNA and activate the transcription of downstream genes (4). Ski will also bind to the Smad proteins specific to bone morphogenic proteins (BMPs) and block BMP signaling in mammalian cells (5).

### SOURCE:

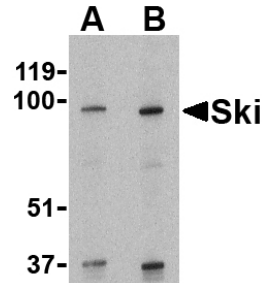
Rabbit polyclonal Ski antibody was raised against a 14 amino acid peptide from near the amino terminus of human Ski (GenBank accession no. P12755).

### APPLICATION:

Ski antibody can be used for detection of Ski by Western blot at 1 – 2  $\mu$ g/ml. (Optimal dilution should be determined by user.) Human kidney tissue lysate can be used as positive control. Ski antibody is human specific. **For research use only.**

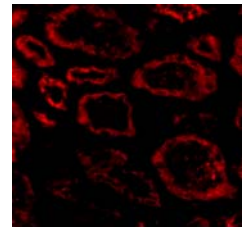
### STORAGE:

Ski antibody is supplied as immunoaffinity purified IgG in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.



Western blot analysis of Ski in human kidney tissue lysate with Ski antibody at (A) 1 and (B) 2  $\mu$ g/ml.

Immunofluorescence of Ski in human kidney tissue with Ski antibody at 20  $\mu$ g/ml.



### RELATED PRODUCTS:

Blocking Peptide, Catalog No. **2259P**.  
Human Kidney Tissue Lysate, Catalog No. **1305**.  
SnoN Antibody, Catalog No. **2255**.

### REFERENCES:

1. Derynck R, Akhurst RJ, and Balmain A. TGF-beta signaling in tumor suppression and cancer progression. *Nat. Genet.* 2001; 29:117-129.
2. Li Y, Turck CM, Teumer JK, et al. Unique sequence, ski, in Sloan-Kettering avian retrovirus with properties of a new cell-derived oncogene. *J. Virol.* 1986; 57:1065-72.
3. Luo K. Ski and SnoN: negative regulators of TGF- $\beta$  signaling. *Curr. Op. Gen. Dev.* 2004; 14:65-70.
4. Massague J and Wotton D. Transcriptional control by the TGF- $\beta$ /Smad signaling system. *EMBO J.* 2000; 19:1745-54.
5. Wang W, Mariani FV, Harland RM, et al. Ski represses bone morphogenic protein signaling in Xenopus and mammalian cells. *Proc. Natl. Acad. Sci. USA* 2000; 97:14394-9. (08-01D)