

# SkiP Antibody

Catalog # ASC10102

### **Product Information**

**Application** WB, IF, E **Primary Accession** O13573

Other Accession NP\_036377, 6912676
Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype IgG
Calculated MW 61494

**Conjugate** Unconjugated

**Application Notes** SkiP antibody can be used for detection of SkiP by Western blot at 0.5 - 1

□g/mL. Antibody can also be used for immunohistochemistry starting at 20

□g/mL. For immunofluorescence start at 20 □g/mL.

#### **Additional Information**

**Gene ID** 22938

Other Names SkiP Antibody: Bx42, SKIP, Prp45, SKIIP, PRPF45, NCOA-62, SNW

domain-containing protein 1, Nuclear protein SkiP, SNW domain containing 1

Target/Specificity SNW1;

**Reconstitution & Storage** SkiP antibody can be stored at 4°C for three months and -20°C, stable for up

to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high

temperatures.

**Precautions** SkiP Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

#### **Protein Information**

Name SNW1

**Function** Involved in pre-mRNA splicing as component of the spliceosome

(PubMed: 11991638, PubMed: 28076346, PubMed: 28502770). As a component of the minor spliceosome, involved in the splicing of U12-type introns in pre-mRNAs (Probable). Required for the specific splicing of CDKN1A pre-mRNA; the function probably involves the recruitment of U2AF2 to the mRNA. May recruit PPIL1 to the spliceosome. May be involved in cyclin- D1/CCND1 mRNA stability through the SNARP complex which associates with both the 3'end of the CCND1 gene and its mRNA. Involved in transcriptional regulation. Modulates TGF-beta-mediated transcription via association with SMAD proteins, MYOD1-mediated transcription via association with PABPN1,

RB1-mediated transcriptional repression, and retinoid-X receptor (RXR)- and vitamin D receptor (VDR)-dependent gene transcription in a cell line-specific manner probably involving coactivators NCOA1 and GRIP1. Is involved in NOTCH1-mediated transcriptional activation. Binds to multimerized forms of Notch intracellular domain (NICD) and is proposed to recruit transcriptional coactivators such as MAML1 to form an intermediate preactivation complex which associates with DNA-bound CBF-1/RBPJ to form a transcriptional activation complex by releasing SNW1 and redundant NOTCH1 NICD.

**Cellular Location** 

**Nucleus** 

## **Background**

SkiP Antibody: TGF-beta and the bone morphogenic proteins (BMPs) are key signaling proteins that regulate numerous cellular processes such as embryonic development and tumorigenesis. Both signal through the Smad protein family and are negatively regulated by Ski and SnoN, two related proto-oncoproteins. Ski functions by binding to the Smad proteins activated by TGF-beta and the (BMPs) and preventing their phosphorylation, inhibiting their ability to bind DNA and activate the transcription of downstream genes. SkiP was originally identified as a Ski-interacting protein and was later found to augment the signals induced by TGF-beta but inhibit transcription induced by BMP-2 in C2C12 cells, suggesting that SkiP is a key player in the signaling cascades inititated by TGF-beta and the BMP protein family.

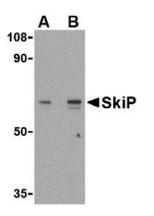
#### References

Derynck R, Akhurst RJ, and Balmain A. TGF- $\beta$  signaling in tumor suppression and cancer progression. Nat. Genet. 2001; 29:117-129.

Li Y, Turck CM, Teumer JK, et al. Unique sequence, SkiP, in Sloan-Kettering avian retrovirus with properties of a new cell-derived oncogene. J. Virol. 1986; 57:1065-72.

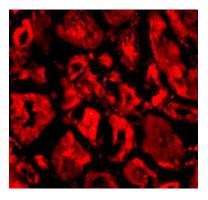
Luo K. SkiP and SkiP: negative regulators of TGF-β signaling. Curr. Op. Gen. Dev. 2004; 14:65-70. Massague J and Wotton D. Transcriptional control by the TGF-b/Smad signaling system. EMBO J. 2000; 19:1745-54.

# **Images**



Western blot analysis of SkiP in mouse skeletal muscle tissue lysate with SkiP antibody at (A) 0.5 and (B) 1 µg/mL.

Immunofluorescence of Ski in human kidney tissue with Ski antibody at 20 µg/mL.



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