### For Research Use Only

# SMAD4 Polyclonal antibody

Catalog Number: 51069-2-AP

4 Publications



**Basic Information** 

Catalog Number: 51069-2-AP Size:

350 µg/ml Source: Rabbit Isotype:

gG

GenBank Accession Number:

BC002379 GeneID (NCBI): 4089 UNIPROT ID: Q13485

SMAD family member 4

Full Name:

Calculated MW: 60 kDa Observed MW: 63 kDa Purification Method:

IF/ICC 1:200-1:800

Antigen affinity purification Recommended Dilutions: WB 1:500-1:2400 IHC 1:50-1:500

**Applications** 

**Tested Applications:** 

WB, IF/ICC, IHC, ELISA, FC (Intra)

**Cited Applications:** 

WB, IF

Species Specificity: human, mouse Cited Species: human, rat, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 **Positive Controls:** 

WB: HeLa cells, HepG2 cells, COLO 320 cells, PC-3 cells, HEK-293 cells, A431 cells, A549 cells, MCF-7 cells

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IHC: human tonsillitis tissue, human lung cancer tissue, human heart tissue, human liver cancer tissue

IF/ICC: HepG2 cells,

# **Background Information**

Mammalian homologs of the Drosophila Mad gene include Smad1, Smad2, Smad3, Smad4 (DPC4), Smad5, Smad6, Smad7 and Smad8. Smad1 and Smad5 are effectors of BMP2 and BMP4 function while Smad2 and Smad3 are involved in TGF and activin-mediated growth modulation. Smad4 has been shown to mediate all of the above activities through interaction with various Smad family members. Smad6 and Smad7 regulate the response to activin/ TGF signaling by interfering with TGF -mediated phosphorylation of other Smad family members. This antibody is a rabbit polyclonal antibody raised against a peptide mapping within human SMAD4.

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
XLiu	36281726	Physiol Res	WB,IF
Jing Li	32738709	Chemosphere	WB
Reiko lida	34883249	Biochim Biophys Acta Mol Basis Dis	WB,IF

Storage

Storage

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

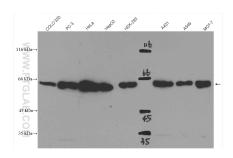
For technical support and original validation data for this product please contact:

T: 4006900926 E: Proteintech-CN@ptglab.com

W: ptgcn.co

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

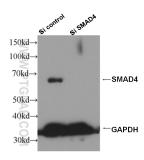
## **Selected Validation Data**



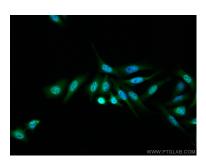
Various lysates were subjected to SDS PAGE followed by western blot with 51069-2-AP (SMAD4 antibody) at dilution of 1:1200 incubated at room temperature for 1.5 hours.



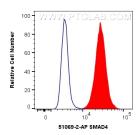
Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 51069-2-AP (SMAD4 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



WB result of SMAD4 antibody (51069-1-AP, 1:1000) with sh-coontrol and sh-SMAD4 transfected HepG2 cells



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using SMAD4 antibody (51069-2-AP) at dilution of 1:400 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



1X10^6 HepG2 cells were intracellularly stained with 0.5 ug Anti-Human SMAD4 (51069-2-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.5 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).