

For Research Use Only

# SMAD1 Polyclonal antibody

Catalog Number: 10429-1-AP

Featured Product

29 Publications



## Basic Information

### Catalog Number:

10429-1-AP

### Size:

150ul, Concentration: 850 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG0701

### GenBank Accession Number:

BC001878

### GeneID (NCBI):

4086

### UNIPROT ID:

Q15797

### Full Name:

SMAD family member 1

### Calculated MW:

52 kDa

### Observed MW:

52 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:1000-1:8000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:500-1:2000

IF/ICC 1:10-1:100

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat

**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**: HT-1080 cells, HEK-293 cells, HepG2 cells, mouse heart tissue, HeLa cells

**IP**: mouse heart tissue,

**IHC**: human colon tissue, rat liver tissue

**IF/ICC**: HeLa cells, HepG2 cells

## Background Information

Transforming growth factor- $\beta$  (TGF- $\beta$ ) superfamily is recognized as one of the largest families of secreted multifunctional peptides exerting different biological effects on a large variety of cell types, such as regulation of hormone secretion, stimulation of extracellular matrix formation, the inhibition of proliferation of many cell types, cell survival, bone formation, and chemotaxis for inflammatory cells. One of the most important proteins that modulate TGF- $\beta$  ligand activity is the SMAD family proteins. SMAD1 is one of the receptor-activated Smads. It's also a signal transducers of BMP signaling and binds to several proteins involved in ubiquitin-proteasome system (UPS). Transcriptional modulator activated by BMP (bone morphogenetic proteins) type 1 receptor kinase

## Notable Publications

Author	Pubmed ID	Journal	Application
Xiangrong Cui	28983616	Mol Med Rep	WB
Xueni Wang	32879393	Sci Rep	WB
Tianmiao Huang	34743989	Biochim Biophys Acta Gen Subj	WB

## 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

\*\*\* 20ul sizes contain 0.1% BSA

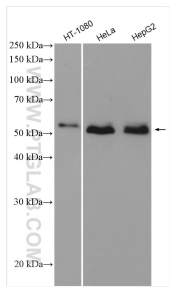
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

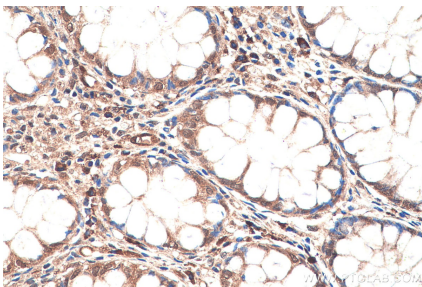
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

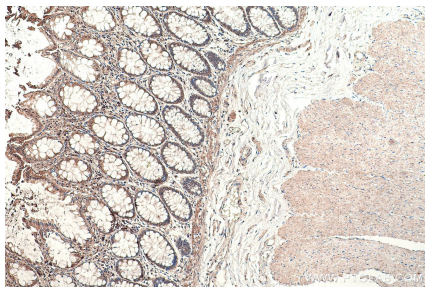
Selected Validation Data



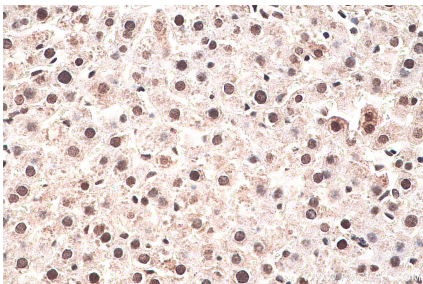
Various lysates were subjected to SDS PAGE followed by western blot with 10429-1-AP (SMAD1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



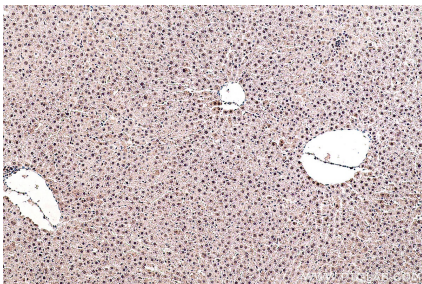
Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 10429-1-AP (SMAD1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



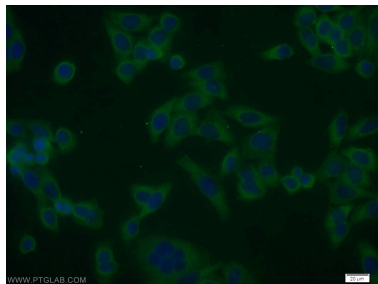
Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 10429-1-AP (SMAD1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



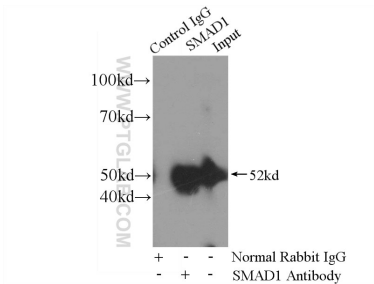
Immunohistochemical analysis of paraffin-embedded rat liver tissue slide using 10429-1-AP (SMAD1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



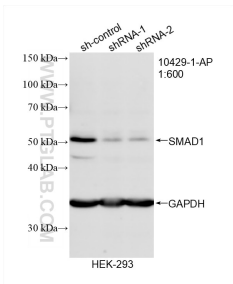
Immunohistochemical analysis of paraffin-embedded rat liver tissue slide using 10429-1-AP (SMAD1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of HeLa cells using 10429-1-AP (SMAD1 antibody) at dilution of 1:25 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



IP result of anti-SMAD1 (IP:10429-1-AP, 4ug; Detection:10429-1-AP 1:500) with mouse heart tissue lysate 8000ug.



WB result of SMAD1 antibody (10429-1-AP; 1:600; incubated at room temperature for 1.5 hours) with sh-Control and sh-SMAD1 transfected HEK-293 cells.