

For Research Use Only

# SMAD4 Polyclonal antibody

Catalog Number: 10231-1-AP

Featured Product

94 Publications



## Basic Information

### Catalog Number:

10231-1-AP

### Size:

150ul, Concentration: 500 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG0299

### GenBank Accession Number:

BC002379

### GeneID (NCBI):

4089

### UNIPROT ID:

Q13485

### Full Name:

SMAD family member 4

### Calculated MW:

60 kDa

### Observed MW:

63-70 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:2000

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

IHC 1:500-1:2000

## Applications

### Tested Applications:

WB, IHC, IP, ELISA

### Cited Applications:

WB, IHC, IF, IP, CoIP, ChIP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, pig, bovine, hamster, goat

**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**: COLO 320 cells, HEK-293 cells, NIH/3T3 cells, mouse liver tissue, HCT 116 cells, HEK-293T cells, Neuro-2a cells

**IP**: HeLa cells,

**IHC**: human skin cancer tissue, human tonsillitis tissue, human cervical cancer tissue, mouse pancreas tissue, rat small intestine tissue

## 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 an internal region of human SMAD4.

## Notable Publications

Author	Pubmed ID	Journal	Application
Lu Liu	34576190	Int J Mol Sci	WB, IP
Bing Li	34528447	Epigenomics	WB
Yanli Xu	30206204	Cell Death Dis	CoIP

## Storage

### Storage:

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

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

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

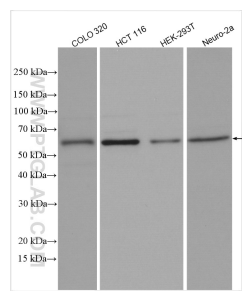
For technical support and original validation data for this product please contact:

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

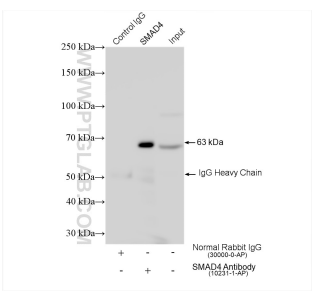
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

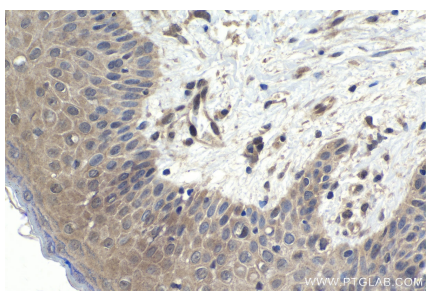
Selected Validation Data



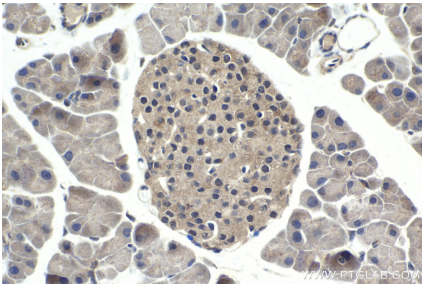
Various lysates were subjected to SDS PAGE followed by western blot with 10231-1-AP (SMAD4 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



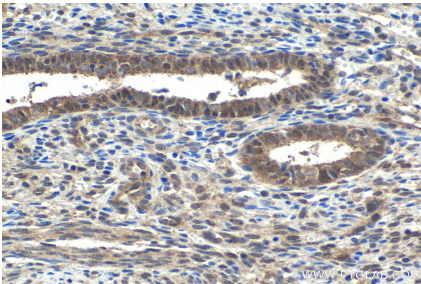
IP result of anti-SMAD4 (IP:10231-1-AP, 4ug; Detection:10231-1-AP 1:1500) with HeLa cells lysate 1320 ug.



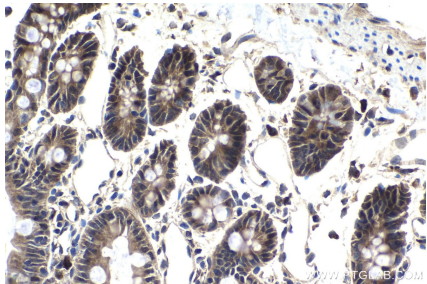
Immunohistochemical analysis of paraffin-embedded human skin cancer tissue slide using 10231-1-AP (SMAD4 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse pancreas tissue slide using 10231-1-AP (SMAD4 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 cervical cancer tissue slide using 10231-1-AP (SMAD4 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 small intestine tissue slide using 10231-1-AP (SMAD4 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).