

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- β (TGF- β) 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- β 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

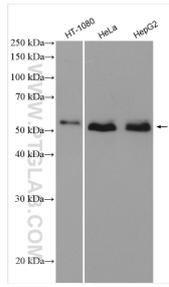
For technical support and original validation data for this product please contact:

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

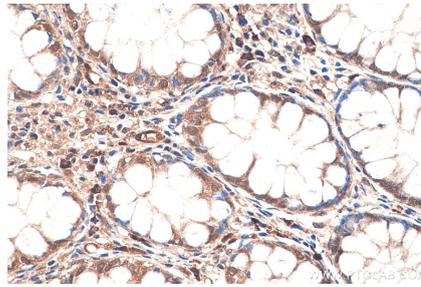
E: proteintech@ptglab.com
W: ptglab.com

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

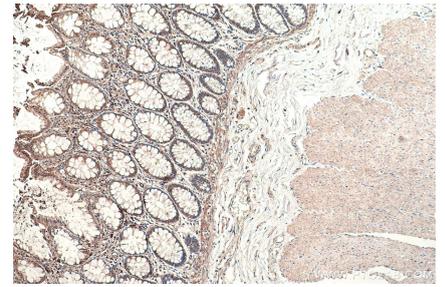
Selected Validation Data



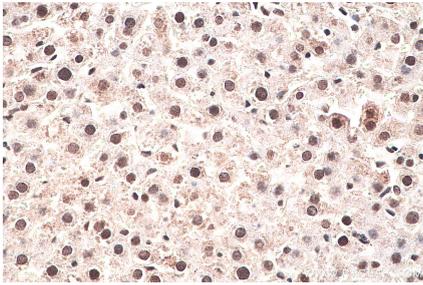
Various lysates were subjected to SDS PAGE followed by western blot with 10429-1-AP (SMAD1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



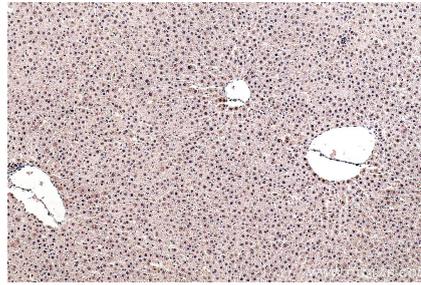
Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 10429-1-AP (SMAD1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



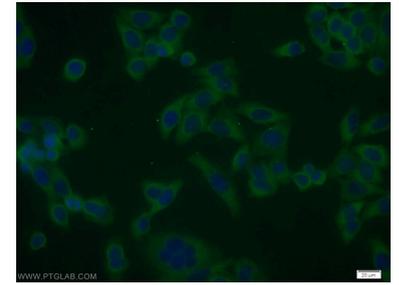
Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 10429-1-AP (SMAD1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



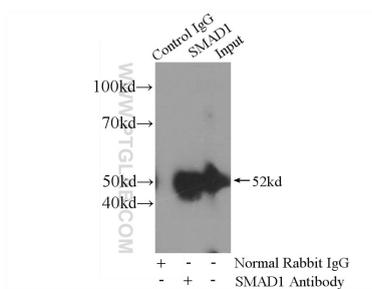
Immunohistochemical analysis of paraffin-embedded rat liver tissue slide using 10429-1-AP (SMAD1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



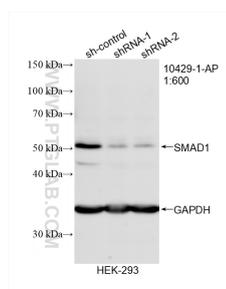
Immunohistochemical analysis of paraffin-embedded rat liver tissue slide using 10429-1-AP (SMAD1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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.