For Research Use Only

SMAD4 Polyclonal antibody

Catalog Number:51069-2-AP 4 Publications

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Basic Information

Catalog Number:
51069-2-AP

Size:
150ul , Concentration: 350 ug/ml by Nanodrop and 167 ug/ml by Bradford method using BSA as the standard;

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
BC002379

GeneID (NCBI):
4089

UNIPROT ID:
Q13485

Full Name:
SMAD family member 4

Calculated MW:
60 kDa

Observed MW:
63 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:2400
IHC 1:50-1:500
IF/ICC 1:200-1:800

Applications

Tested Applications:
WB, IHC, IF/ICC, FC (Intra), ELISA

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

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 interactionwith 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
X Liu	36281726	Physiol Res	WB,IF
Jing Li	32738709	Chemosphere	WB
Reiko Iida	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

*** 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
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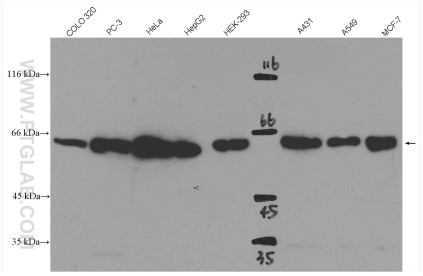
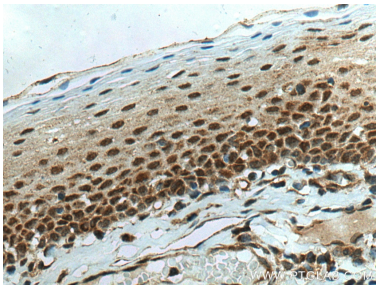
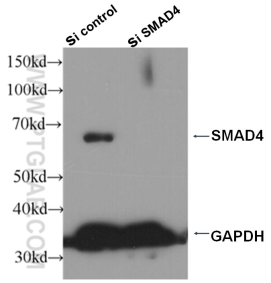
Selected Validation Data



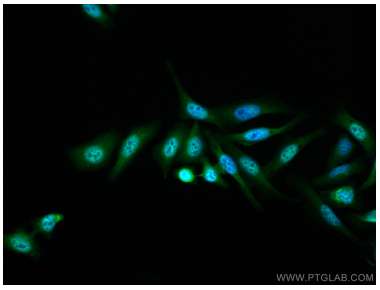
Various lysates were subjected to SDS PAGE followed by western blot with 51069-2-AP (SMAD4 antibody) at dilution of 1:1200 incubated at room temperature for 1.5 hours.



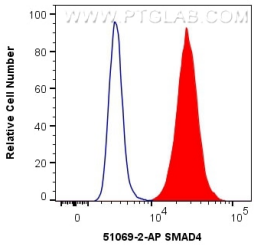
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 51069-2-AP (SMAD4 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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 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 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).