

Allgemeine Informationen

Katalog-Nr.:
12570-1-AP

Größe:

150ul, Konzentration: 300 µg/ml von Nanodrop und 220 µg/ml durch die Bradford-Methode mit BSA als Standard;

Wirt:

Kaninchen

Isotyp:

IgG

Immunogen Katalognummer:

AG3237

GenBank-Zugangsnummer:

BC014840

GeneID (NCBI):

4087

Vollständiger Name:

SMAD family member 2

Berechnete Masse:

467 aa, 52 kDa

Beobachtete Masse:

58 kDa

Reinigungsmethode:

Antigen-Affinitätsreinigung

Empfohlene Verdünnungen:

WB 1:2000-1:10000

IP 0.5-4.0 µg für IP und 1:500-1:2000 für WB

IHC 1:50-1:500

IF 1:10-1:100

Anwendungen

Geprüfte Anwendungen:

IF, IHC, IP, WB, ELISA

In Publikationen genannte Anwendungen:

ChIP, CoIP, IF, IHC, WB

Getestete Reaktivität:

Human, Maus, Ratte

Zitierte Arten:

Human, Maus, Ratte

Hinweis-IHC: Antigendemaskierung mit TE-Puffer pH 9,0 empfohlen. (*) Wahlweise kann die Antigendemaskierung auch mit Citratpuffer pH 6,0 erfolgen.

Positivkontrollen:

WB: A549-Zellen, HEK-293-Zellen, HeLa-Zellen, HepG2-Zellen, Jurkat-Zellen, Maus-Skelettmuskelgewebe, MCF-7-Zellen, PC-3-Zellen, Ratten-Skelettmuskelgewebe

IP: HepG2-Zellen,

IHC: humanes Kolonkarzinomgewebe, humanes Endometriumkarzinomgewebe, humanes Magenkrebsgewebe, Maus-Kolongewebe, Ratten-Kolongewebe

IF: HepG2-Zellen,

Hintergrundinformationen

SMAD2, also named as MADH2 and MADR2, belongs to the dwarfin/SMAD family, contains 1 MH1 (MAD homology 1) domain and 1 MH2 (MAD homology 2) domain. SMAD2 is a receptor-regulated SMAD (R-SMAD) that is an intracellular signal transducer and transcriptional modulator activated by TGF-beta (transforming growth factor) and activin type 1 receptor kinases. This protein may act as a tumor suppressor in colorectal carcinoma. It is phosphorylated on one or several of Thr-220, Ser-245, Ser-250, and Ser-255. In response to TGF-beta, it is phosphorylated on Ser-465/467 by TGF-beta and activin type 1 receptor kinases, and then able to interact with SMURF2, recruiting other proteins, such as SNON, for degradation. In response to decorin, the naturally occurring inhibitor of TGF-beta signaling, it is phosphorylated on Ser-240 by CaMK2. It is phosphorylated by MAPK3 upon EGF stimulation; which increases transcriptional activity and stability, and is blocked by calmodulin. In response to TGF-beta, it is ubiquitinated by NEDD4L, which promotes its degradation. In response to TGF-beta signaling, it is acetylated on Lys-19 by coactivators, which increases transcriptional activity. This antibody is a rabbit polyclonal antibody raised against residues near the N terminus of human SMAD2. The molecular weight of unphosphorylated forms of Smad2 is 52 kDa and phosphorylated forms of Smad2 is 58 kDa. (PMID: 9006934). The ubiquitination form of Smad2 is ~70 kDa (PMID: 25998442).

Bemerkenswerte Veröffentlichungen

Verfasser	Pubmed ID	Journal	Anwendung
Shun Gu	33007305	Exp Eye Res	WB
Shaling Li	36169092	Cancer Sci	WB
Bingyu Xie	36179941	Mol Cell Endocrinol	WB

Lagerung

Lagerungsbedingungen:

Bei -20°C lagern. Nach dem Versand ein Jahr lang stabil

Lagerungspuffer:

PBS mit 0.02% Natriumazid und 50% Glycerin pH 7.3.

Aliquotieren ist nicht notwendig bei -20°C Lagerung

***** 20ul-Größen enthalten 0.1% BSA**

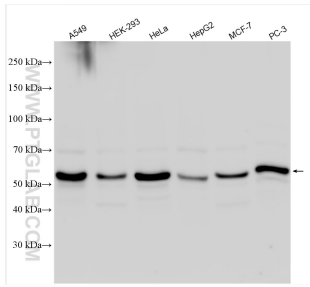
For technical support and original validation data for this product please contact:

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

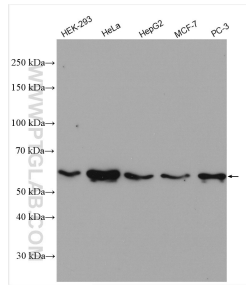
E: proteintech@ptglab.com
W: ptglab.com

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

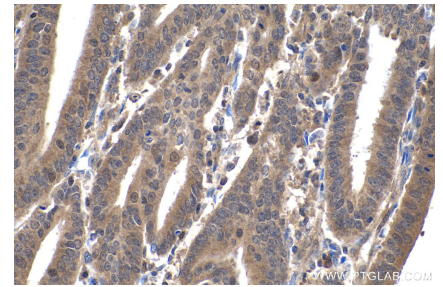
Ausgewählte Validierungsdaten



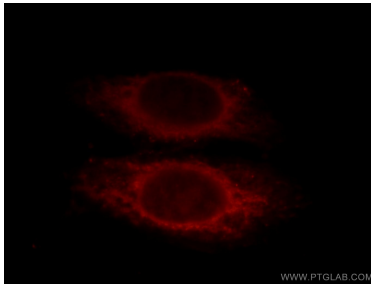
Various lysates were subjected to SDS PAGE followed by western blot with 12570-1-AP (SMAD2 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



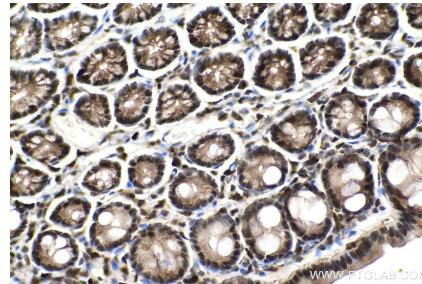
Various lysates were subjected to SDS PAGE followed by western blot with 12570-1-AP (SMAD2 antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



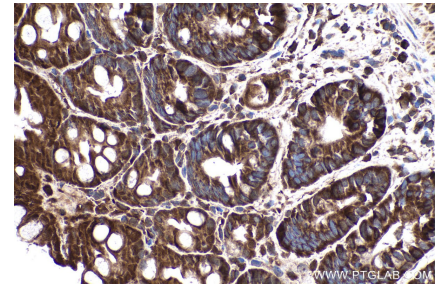
Immunohistochemical analysis of paraffin-embedded human endometrial cancer tissue slide using 12570-1-AP (SMAD2 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



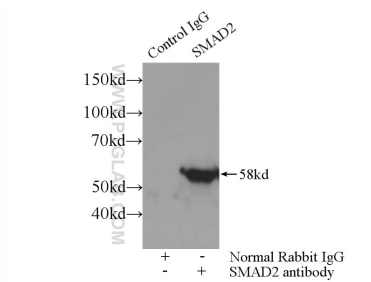
Immunofluorescent analysis of HepG2 cells, using SMAD2 antibody 12570-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red).



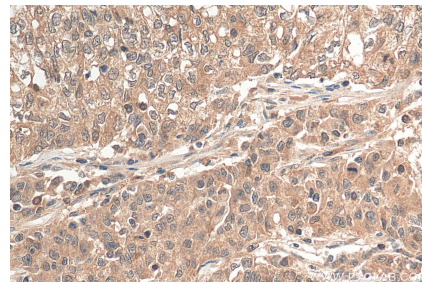
Immunohistochemical analysis of paraffin-embedded rat colon tissue slide using 12570-1-AP (SMAD2 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



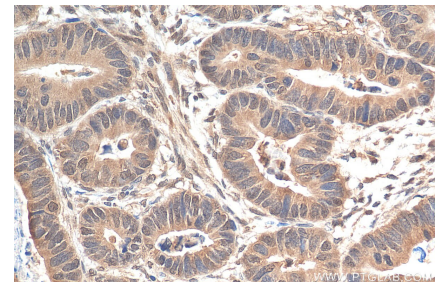
Immunohistochemical analysis of paraffin-embedded mouse colon tissue slide using 12570-1-AP (SMAD2 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP Result of anti-SMAD2 (IP:12570-1-AP, 3ug; Detection:12570-1-AP 1:1000) with HepG2 cells lysate 3000ug.



Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 12570-1-AP (SMAD2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 12570-1-AP (SMAD2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).