

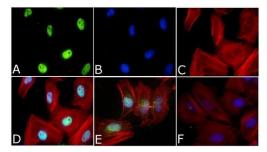


# Phospho-SMAD2 (Ser465, Ser467) Polyclonal Antibody

<b>Product Details</b>		
Size	100 μL	
Species Reactivity	Human, Mouse	
Published Species	Human, Mouse	
Host/Isotype	Rabbit / IgG	
Class	Polyclonal	
Туре	Antibody	
Conjugate	Unconjugated	
Immunogen	The antiserum was produced against a chemically synthesized phosphopeptide derived from a region of human Smad2 that contains serines 465 and 467. The sequence is conserved in mouse and rat.	
Form	Liquid	
Purification	Antigen affinity chromatography	
Storage buffer	Dulbecco's PBS, pH 7.3, with 1mg/mL BSA	
Contains	0.05% sodium azide	
Storage conditions	-20°C	
RRID	AB_2533614	

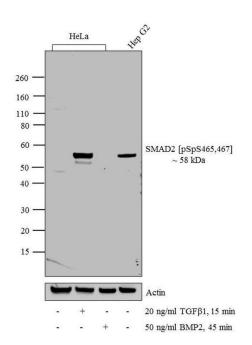
Applications	Tested Dilution	Publications
Western Blot (WB)	1:1,000	15 Publications
Immunohistochemistry (IHC)	-	14 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:20-1:200	1 Publication
Immunocytochemistry (ICC/IF)	1:250	5 Publications
ChIP assay (ChIP)	10 μL	-

# Product Images For Phospho-SMAD2 (Ser465, Ser467) Polyclonal Antibody



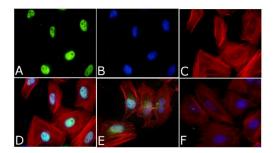
### Phospho-SMAD2 (Ser465, Ser467) Antibody (44-244G)

Modulation of expression of target protein by cell treatment demonstrates antibody specificity. Immunofluorescence analysis ofPhospho-SMAD2 (Ser465, Ser467) using Phospho-SMAD2 (Ser465, Ser467) Rabbit Polyclonal Antibody (Product # 44-244G) shows nuclear localization of Phospho-Aurora A (Thr288) in Jurkat cells treated with hydrogen peroxide. {TM}



# Phospho-SMAD2 (Ser465, Ser467) Antibody (44-244G) in WB

Western blot analysis of SMAD2 (pS465/pS467) was performed by loading 20 µg of HeLa (lane1), HeLa treated for 15 minutes with 20 ng/mL TGFbeta1 (lane2), HeLa treated for 45 minutes with 50 ng/mL BMP2 (lane3) and Hep G2 (lane4) cell lysate using Novex® NuPAGE® 4-12 % Bis-Tris gel (Product # NP0322BOX), XCell SureLock™ Electrophoresis System (Product # El0002), Novex® Sharp Pre-Stained Protein Standard (LC5800), and iBlot® 2 Dry Blotting System (IB21001). Proteins were transferred to a nitrocellulose membrane and blocked with 5 % skim milk for 1 hour at room temperature. SMAD2 (pS465/pS467) was detected at ~ 58 kDa using SMAD2 (pS465/pS467) Rabbit Polyclonal Antibody (Product # 44-244G) at 1:1000 dilution in 5 % skim milk at 4° C overnight on a rocking platform. Goat Anti-Rabbit IgG - HRP Secondary Antibody (G21234) at 1:5000 dilution was used and chemiluminescent detection was performed using Pierce™ ECL Western Blotting Substrate (Product # 32106).



#### Phospho-SMAD2 (Ser465, Ser467) Antibody (44-244G) in ICC/IF

Immunofluorescent analysis of Phospho-SMAD2 pSer465/pSer467 Antibody was done on 70% confluent log phase HeLa cells. The cells were fixed with 4% paraformaldehyde for 15 minutes, permeabilized with 0.25% Triton™ X-100 for 10 minutes, and blocked with 5% BSA for 1 hour at room temperature. The cells were treated with TGF-beta1 (20 ng/mL) for 15 minutes and labeled with Phospho-SMAD2 pSer465/pSer467 Antibody (Product # 44-244G) at 1:250 dilution in 1% BSA and incubated for 3 hours at room temperature and then labeled with Alexa Fluor 488 Goat Anti-Rabbit IgG Secondary Antibody (Product # A-11008) at a dilution of 1:400 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Alexa Fluor 594 Phalloidin (Product # A12381). Panel d is a merged image showing Nuclear localization. Panel e showing merged image of untreated cells with less nuclear signals Panel f is a no primary antibody control. The images were captured at 40X magnification.

View more figures on thermofisher.com

#### **□** 35 References

## Western Blot (15)

Pharmaceuticals (Basel, Switzerland)

Fucoidan-Mediated Inhibition of Fibrotic Properties in Oral Submucous Fibrosis via the MEG3/miR-181a/Egr1 Axis.

"44-244G was used in Western Blotting to investigate the anti-fibrotic effect of fucoidan on oral fibrosis." Authors: Fang CY,Chen SH,Huang CC,Liao YW,Chao SC,Yu CC

**Year** 2022

Species Human

Frontiers in endocrinology

Differential Role of Smad2 and Smad3 in the Acquisition of an Endovascular Trophoblast-Like Phenotype and Preeclampsia.

"Published figure using Phospho-SMAD2 (Ser465, Ser467) polyclonal antibody (Product # 44-244G) in Immunohistochemistry"

Authors: Brki J, Dunk C, Shan Y, O'Brien JA, Lye P, Qayyum S, Yang P, Matthews SG, Lye SJ, Peng C

**Year** 2021

Species Human

Dilution 1:500

View more WB references on thermofisher.com

# **Immunohistochemistry (14)**

JCI insight

Protein phosphatase PPM1A inhibition attenuates osteoarthritis via regulating TGF-/Smad2 signaling in chondrocytes.

"44-244G was used in Immunohistochemistry-immunofluorescence to identify PPM1A as a pivotal regulator of cartilage homeostasis and demonstrated that PPM1A inhibition attenuates OA progression via regulating TGF-/SMAD2 signaling in chondrocytes and provided PPM1A as a potential target for OA treatment."

Authors: Ge Q,Shi Z,Zou KA,Ying J,Chen J,Yuan W,Wang W,Xiao L,Lin X,Chen D,Feng XH,Wang PE,Tong P,Jin H

**Year** 2023

Species Human

Dilution 1:300

The Journal of clinical investigation

Targeting TGF- for treatment of osteogenesis imperfecta.

"Published figure using Phospho-SMAD2 (Ser465, Ser467) polyclonal antibody (Product # 44-244G) in Immunohistochemistry"

Authors: Song IW,Nagamani SC,Nguyen D,Grafe I,Sutton VR,Gannon FH,Munivez E,Jiang MM,Tran A,Wallace M, Esposito P,Musaad S,Strudthoff E,McGuire S,Thornton M,Shenava V,Rosenfeld S,Huang S,Shypailo R,Orwoll E,Lee B

**Year** 2022

Species Human

View more IHC references on thermofisher.com

## More applications with references on thermofisher.com

IHC (P) (1) ICC/IF (5)

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