

**SMAD3 Antibody**  
**Rabbit Anti-Human SMAD3 Polyclonal**  
**Catalog # ASM10578**

**Specification**

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**SMAD3 Antibody - Product Information**

Application	IHC
Primary Accession	<a href="#">P84022</a>
Other Accession	<a href="#">NP_001138574.1</a>
Host	Rabbit
Clonality	Polyclonal
Format	SMAD3
<b>Target/Specificity</b>	
SMAD3	

**Other Names**

hSMAD3 Antibody, Mothers against decapentaplegic homolog 3 Antibody, Mothers against DPP homolog 3 Antibody, hMAD 3 Antibody, DKFZP586N0721 Antibody, Mad homolog JV15 2 Antibody, LDS1C Antibody, HSPC193 Antibody, MAD homolog 3 Antibody, SMAD3 Antibody, MGC60396 Antibody, Mad3 Antibody, SMAD family member 3 Antibody, SMAD 3 Antibody, MAD (mothers against decapentaplegic Drosophila) homolog 3 Antibody, JV15 2 Antibody, SMAD3\_HUMAN Antibody, MADH3 Antibody, JV15-2 Antibody, MAD, mothers against decapentaplegic homolog 3 Antibody, HST17436 Antibody, Smad3 Antibody, SMA and MAD related protein 3 Antibody, SMAD, mothers against DPP homolog 3 Antibody, MADH 3 Antibody, LDS3 Antibody, SMAD Antibody, JV152 Antibody, Mad protein homolog Antibody, hMAD-3 Antibody, DKFZp686J10186 Antibody

**Immunogen**

Synthetic peptide of Human SMAD3 (110-210aa), conjugated to Keyhole Limpet Haemocyanin (KLH).

**Purification**

Peptide Affinity Purified

Storage **-20°C**

**Storage Buffer**

PBS pH 7.4, 50% glycerol, 0.09% sodium azide \*Storage buffer may change when conjugated

Shipping Temperature **Blue Ice or 4°C**

**Certificate of Analysis**

A 1:1000 dilution of SPC-729 was sufficient for detection of SMAD3 in 15 µg of human HeLa cell lysates by ECL immunoblot analysis using goat anti-rabbit IgG:HRP as the secondary antibody.

**Cellular Localization**

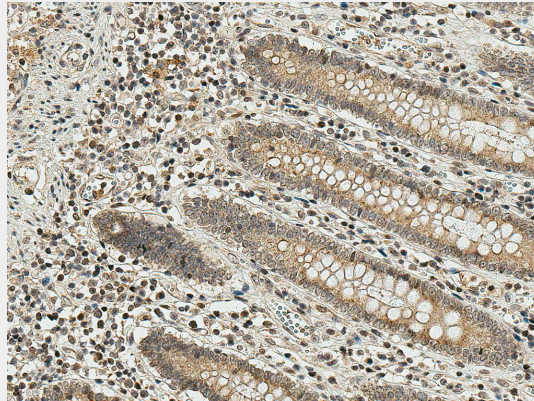
Cytoplasm | Nucleus

**SMAD3 Antibody - Protocols**

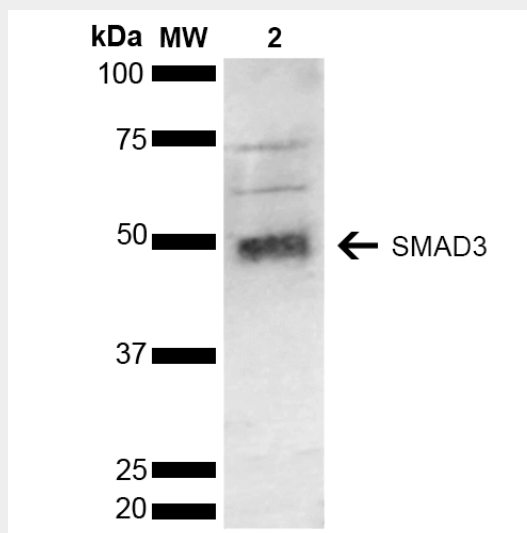
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### SMAD3 Antibody - Images



Immunohistochemistry analysis using Rabbit Anti-SMAD3 Polyclonal Antibody (SPC-729). Tissue: Colonic Adenocarcinoma. Species: Human. Fixation: Formalin Fixed Paraffin-Embedded. Primary Antibody: Rabbit Anti-SMAD3 Polyclonal Antibody (SPC-729) at 1:50 for 30 min at RT. Counterstain: Hematoxylin. Magnification: 20X. HRP-DAB Detection. | Western blot analysis of Human Cervical cancer cell line (HeLa) lysate showing detection of ~48.1 kDa SMAD3 protein using Rabbit Anti-SMAD3 Polyclonal Antibody (SPC-729). Lane 1: Molecular Weight Ladder (MW). Lane 2: Cervical Cancer cell line (HeLa) lysate. Load: 10 µg. Block: 5% Skim Milk in 1X TBST. Primary Antibody: Rabbit Anti-SMAD3 Polyclonal Antibody (SPC-729) at 1:1000 for 2 hours at RT. Secondary Antibody: Goat Anti-Rabbit HRP:IgG at 1:3000 for 1 hour at RT. Color Development: ECL solution for 5 min at RT. Predicted/Observed Size: ~48.1 kDa. Other Band(s): due to post translational modifications.



Immunohistochemistry analysis using Rabbit Anti-SMAD3 Polyclonal Antibody (SPC-729). Tissue: Colonic Adenocarcinoma. Species: Human. Fixation: Formalin Fixed Paraffin-Embedded. Primary

Antibody: Rabbit Anti-SMAD3 Polyclonal Antibody (SPC-729) at 1:50 for 30 min at RT. Counterstain: Hematoxylin. Magnification: 20X. HRP-DAB Detection. | Western blot analysis of Human Cervical cancer cell line (HeLa) lysate showing detection of ~48.1 kDa SMAD3 protein using Rabbit Anti-SMAD3 Polyclonal Antibody (SPC-729). Lane 1: Molecular Weight Ladder (MW). Lane 2: Cervical Cancer cell line (HeLa) lysate. Load: 10 µg. Block: 5% Skim Milk in 1X TBST. Primary Antibody: Rabbit Anti-SMAD3 Polyclonal Antibody (SPC-729) at 1:1000 for 2 hours at RT. Secondary Antibody: Goat Anti-Rabbit HRP:IgG at 1:3000 for 1 hour at RT. Color Development: ECL solution for 5 min at RT. Predicted/Observed Size: ~48.1 kDa. Other Band(s): due to post translational modifications.

### **SMAD3 Antibody - Background**

Members of the Smad family of cell signaling molecules are components of a critical intracellular pathway that transmit TGF- $\beta$  signals from the cell surface into the nucleus. There are three distinct classes of Smads: the receptor-regulated Smads (R-Smads), the common-mediator Smad (co-Smad), and the antagonistic or inhibitory Smads. Following stimulation by TGF- $\beta$ , Smad2 and Smad3 become phosphorylated at their carboxyl termini (Ser465 and 467 on Smad2; Ser423 and 425 on Smad3) by TGF- $\beta$  Receptor I. Phosphorylated Smad 2/3 can complex with Smad4, translocate to the nucleus and regulate gene expression.

### **SMAD3 Antibody - References**

1. Heldin C.H. et al. (1997) Nature. 390: 465-471.
2. Attisano L. and Wrana, J.L. (1998) Curr Opin Cell Biol. 10: 188-194.
3. Massagué J. (1998) Annu Rev Biochem. 67: 753-791.
4. Whitman M. (1998) Genes Dev. 12: 2445-2462.
5. Wu G. et al. (2000) Science. 287: 92-97.
6. Abdollah S., et al. (1997) J. Biol. Chem. 272: 27678-27685.
7. Souchelnytskyi S., et al. (1997) J. Biol. Chem. 272: 28107-28115.
8. Liu X., et al. (1997) Proc. Natl. Acad. Sci. USA. 94: 10669-10674.