

## Product datasheet for **AP23361PU-N**

### SMAD2 (N-term) Rabbit Polyclonal Antibody

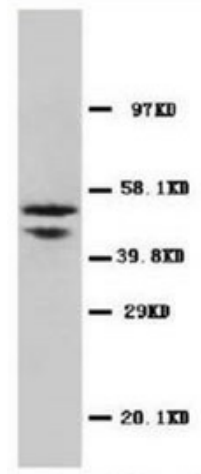
#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	Western blot: 0.1-1.0 µg/ml. Immunohistochemistry on paraffin-embedded sections: 0.5-2.0 µg/ml Immunohistochemistry on frozen sections: 0.4-1.0 µg/ml
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide corresponding to the N-terminal of human SMAD2/3
Specificity:	This antibody detects SMAD2 (+SMAD3) (N-term). No cross reactivity with other proteins.
Formulation:	State: Aff - Purified State: Lyophilized Ig fraction
Reconstitution Method:	1.2% sodium acetate or neutral PBS. If 0.5ml of PBS is used, the antibody concentration will be 100µg/ml.
Purification:	Immunogen affinity purified
Conjugation:	Unconjugated
Storage:	Store at 2 - 8 °C for up to one month or (in aliquots) at -20 °C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	SMAD family member 2
Database Link:	<a href="#">Entrez Gene 17126 Mouse</a> <a href="#">Entrez Gene 29357 Rat</a> <a href="#">Entrez Gene 4087 Human Q15796</a>

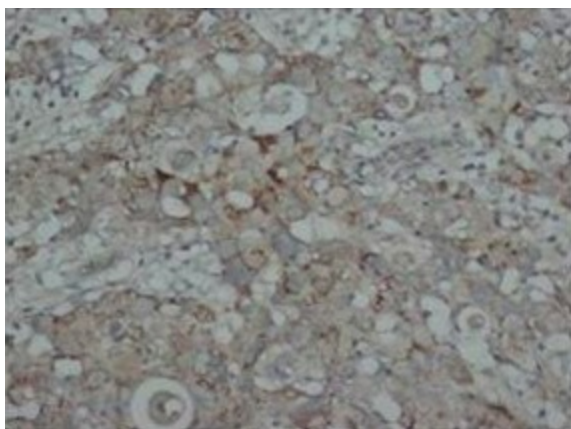


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<b>Background:</b>	SMAD proteins transmit signals from transmembrane serine/threonine kinase receptors to the nucleus. Transforming growth factor (TGF)-beta stimulation leads to phosphorylation and activation of Smad2 and Smad3, which form complexes with Smad4 that accumulate in the nucleus and regulate transcription of target genes. Smad2 and Smad3 share highly homology. SMAD2/SMAD3 signal transduction appeared to be important in the regulation of muscle-specific genes. SMAD proteins transmit signals from transmembrane serine/threonine kinase receptors to the nucleus. Smad2 is a 58 kDa member of a family of proteins involved in cell proliferation, differentiation and development. Smad3 is a 50 kDa member of a family of proteins that act as key mediators of TGF beta superfamily signaling in cell proliferation, differentiation and development.
<b>Synonyms:</b>	SMAD family member 2, SMAD-2, SMAD 2, MADH2, MAD homolog 2, MADR2, Mad-related protein 2, JV18-1
<b>Protein Families:</b>	Cancer stem cells, Druggable Genome, Embryonic stem cells, ES Cell Differentiation/IPS, Stem cell relevant signaling - JAK/STAT signaling pathway, Stem cell relevant signaling - TGFb/BMP signaling pathway, Transcription Factors
<b>Protein Pathways:</b>	Adherens junction, Cell cycle, Colorectal cancer, Pancreatic cancer, Pathways in cancer, TGF-beta signaling pathway, Wnt signaling pathway

**Product images:**

Western blot analysis of HeLa cell tissue lysis using SMAD2/3 antibody



Immunohistochemical analysis of paraffin-embedded human intestine cancer tissue sections using SMAD2/3 antibody