

Product datasheet for **AP01455PU-N**

SMAD3 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	Western Blot: 1/500-1/1000. Immunohistochemistry on Paraffin Sections: 1/50-1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	This antibody detects endogenous levels of Smad3 protein.
Formulation:	Phosphate buffered saline (PBS), pH~7.2 with 0.05% Sodium Azide as preservative State: Aff - Purified State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE).
Concentration:	1.0 mg/ml
Purification:	Affinity Chromatography using epitope-specific immunogen.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~48 kDa
Gene Name:	SMAD family member 3
Database Link:	Entrez Gene 4088 Human P84022



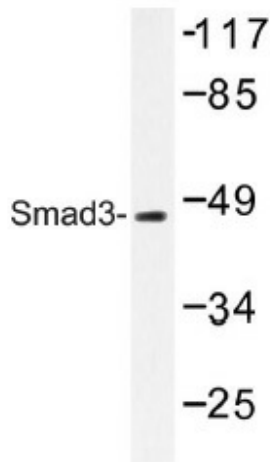
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Background:

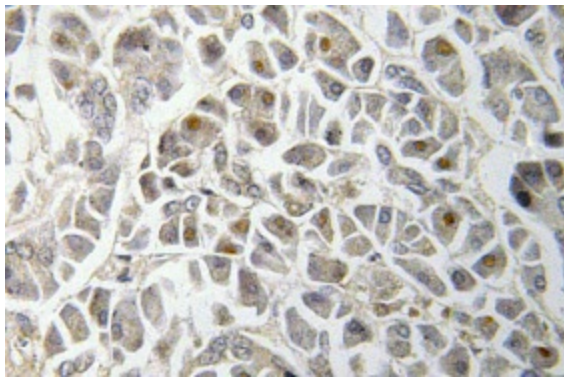
Smad3 is a 50 kDa member of a family of proteins that act as key mediators of TGF beta superfamily signaling in cell proliferation, differentiation and development. The Smad family is divided into three subclasses: receptor regulated Smads, activin/TGF beta receptor regulated (Smad2 and 3) or BMP receptor regulated (Smad 1, 5, and 8); the common partner, (Smad4) that functions via its interaction to the various Smads; and the inhibitory Smads, (Smad6 and 7). Activated Smad3 oligomerizes with Smad4 upon TGF beta stimulation and translocates as a complex into the nucleus, allowing its binding to DNA and transcription factors. Phosphorylation of the two TGF beta dependent serines 423 and 425 in the C terminus of Smad3 is critical for Smad3 transcriptional activity and TGF beta signaling.

Synonyms:

SMAD family member 3, SMAD 3, SMAD-3, Mad3, MAD-3, MADH3, MAD homolog 3, JV15-2

Product images:

Western blot (WB) analysis of Smad3 antibody (Cat.-No.: AP01455PU-N) in extracts from HUVEC cells.



Immunohistochemistry (IHC) analysis of Smad3 antibody (Cat.-No.: AP01455PU-N) in paraffin-embedded human colon carcinoma tissue.