

## Product datasheet for **AP08075PU-N**

### SMAD3 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC
Recommended Dilution:	Immunofluorescence: 1/100~1/200. Immunohistochemistry on Paraffin-Embedded Sections: 1/50~1/100.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	The antiserum was produced against synthesized non-phosphopeptide derived from human SMAD3 around the phosphorylation site of Serine 425 (C-S-S-V-Sp).
Specificity:	This antibody detects endogenous levels of total SMAD3 protein.
Formulation:	PBS (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150 mM NaCl, 0.02% Sodium Azide and 50% Glycerol. State: Aff - Purified State: Liquid purified Ig fraction.
Concentration:	lot specific
Purification:	Immunoaffinity Chromatography using epitope-specific immunogen.
Conjugation:	Unconjugated
Storage:	Store the antibody (in aliquots) at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: One year from despatch.
Gene Name:	SMAD family member 3
Database Link:	<a href="#">Entrez Gene 4088 Human P84022</a>



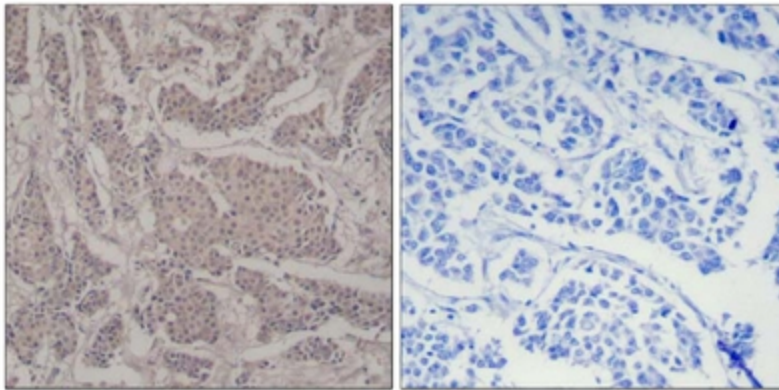
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**Background:**

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:**

Peptide

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Figure 1. Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using SMAD3 Antibody.

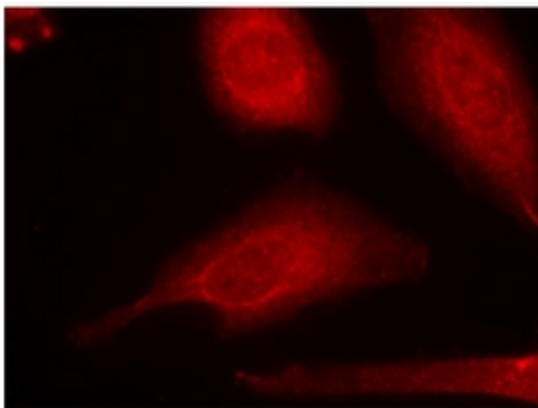


Figure 2. Immunofluorescence staining of methanol-fixed HeLa cells using SMAD3 antibody (Red).