

## Product datasheet for **AP08027PU-N**

### SMAD3 pSer425 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC
Recommended Dilution:	<b>Immunohistochemistry on Paraffin Sections:</b> 1/50-1/100.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide Sequence around the phosphorylation site of Ser425 (C-S-S-VpS) derived from Human SMAD3
Specificity:	This antibody detects endogenous levels of Smad3 only when phosphorylated at Serine 425.
Formulation:	PBS (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, containing 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 phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.
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 (also known as Mothers against decapentaplegic homolog 3 Mothers against DPP homolog 3, Mad3, hMAD-3, JV15-2 or hSMAD3) is a transcriptional modulator activated by TGF-beta (transforming growth factor) and activin type 1 receptor kinase. These activators exert diverse effects on a wide array of cellular processes. The Smad proteins mediate much of the signaling responses induced by the TGF-b superfamily. Briefly, activated type I receptor phosphorylates receptor-activated Smads (R-Smads) at their c-terminal two extreme serines in the SSXS motif, e.g. Smad2 and Smad3 proteins in the TGF-b pathway, or Smad1, Smad5 or Smad8 in the BMP pathway. Then the phosphorylated R-Smad translocated into nucleus, where they regulate transcription of target genes. Based on microarray and animal model experiments, Smad3 accounts for at least 80% of all TGF-b-mediated response.

**Synonyms:**

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

**Note:**

Molecular Weight: 52 kDa

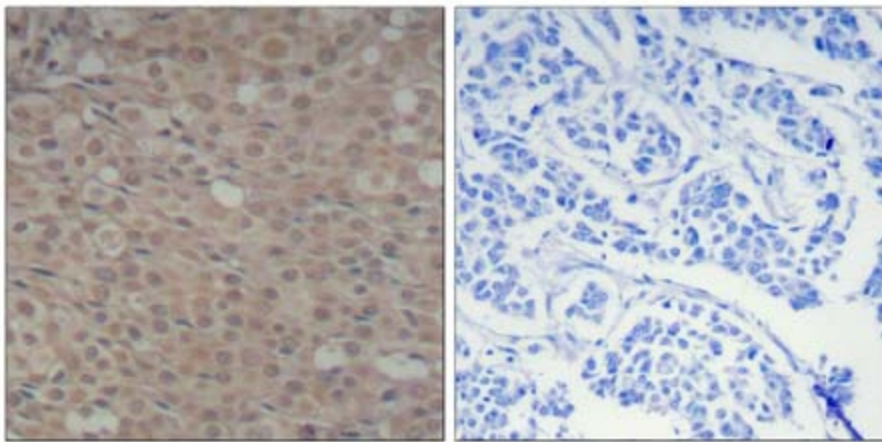
**Product images:**

Figure 1. Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using SMAD3 (Phospho-Ser425) Antibody (Left) or the same peincubated with blocking peptide (Right).