

# **Product datasheet for AP08074PU-S**

#### **OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

### **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 208 (N-L-Sp-P-N).

**Specificity:** This antibody detects endogenous levels of total SMAD3 protein.

Formulation: PBS (without Mg2+ and Ca2+), 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: Entrez Gene 4088 Human

P84022



#### 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:**

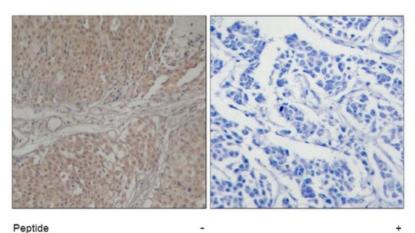


Figure 1. Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using SMAD3 Antibody.

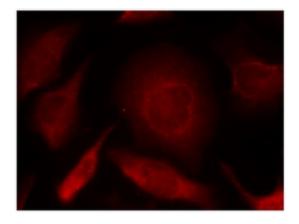


Figure 2. Immunofluorescence staining of methanol-fixed HeLa cells using SMAD3 antibody (Red).