

# Phospho SMAD3 (Ser425) Antibody

12/19

**CATALOG NO.:** A1987-100 (100 µl)

**BACKGROUND DESCRIPTION:** The SMAD family of proteins are a group of intracellular signal transducer proteins similar to the gene products of the Drosophila gene 'mothers against decapentaplegic' (Mad) and the C. elegans gene Sma. The SMAD3 protein functions in the transforming growth factor-beta signaling pathway, and transmits signals from the cell surface to the nucleus, regulating gene activity and cell proliferation. It also functions as a tumor suppressor. Mutations in this gene are associated with aneurysms-osteoarthritis syndrome and Loeys-Dietz Syndrome 3.

**ALTERNATE NAMES:** MADH3; Mothers against decapentaplegic homolog 3; MAD homolog 3; Mad3; Mothers against DPP homolog 3; hMAD-3; JV15-2; SMAD family member 3; SMAD 3; Smad3; hSMAD3

**ANTIBODY TYPE:** Polyclonal

**HOST/ISOTYPE:** Rabbit / IgG

**IMMUNOGEN:** KLH-conjugated synthetic peptide targeting a sequence within the C-term region of human SMAD3

**MOLECULAR WEIGHT:** 60 kDa

**PURIFICATION:** Affinity purified

**FORM:** Liquid

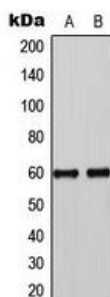
**FORMULATION:** In 0.42% Potassium phosphate; 0.87% NaCl; pH 7.3; 30% glycerol; and 0.01% sodium azide

**SPECIES REACTIVITY:** Human, Chicken

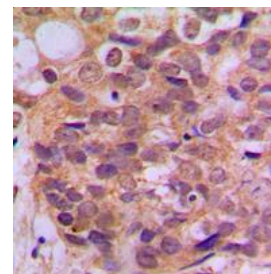
**STORAGE CONDITIONS:** Store at -20°C. Avoid freeze / thaw cycles

**APPLICATIONS AND USAGE:** WB 1:500 - 1:1000, IHC 1:100 - 1:200

**Note:** This information is only intended as a guide. The optimal dilutions must be determined by the user



Western blot analysis of phospho SMAD3 (Ser425) expression in A431 EGF-treated (A); HL60 TGF-treated (B) whole cell lysates.



Immunohistochemical analysis of phospho SMAD3 (Ser425) staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) and then incubated with the antibody at RT and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with hematoxylin and mounted with DPX.

## RELATED PRODUCTS:

Anti-Smad4 Rabbit Monoclonal Antibody (A1605)  
 Smad7 Antibody (3670)  
 Anti-SMAD2/3 Antibody (A1214)  
 Smad1 Antibody (3461)