

# Phospho SMAD2 (Ser465) Antibody

12/19

**CATALOG NO.:** A1950-100 (100 µl)

**BACKGROUND DESCRIPTION:** Smads are a group of intracellular proteins that act as signal transducers for the members of TGF-beta superfamily. Based on their roles, Smads are categorized in three groups: receptor regulated (R-Smads) which include Smad 1,2,3,5 and 8; co-regulatory Smads, which includes only Smad4 and inhibitory Smads (I-Smads), which includes Smad6 and 7. When TGF-beta superfamily serine/threonine kinase receptors are activated, this leads to phosphorylation of R-Smads, which then forms a heteromeric complex with co-Smad (Smad4) and as a result, this complex translocates to the nucleus and regulate gene expression of several downstream targets in association with other proteins. I-Smads, on the other hand, do not allow the R-Smads to form a heteromeric complex with co-Smads, thus disrupting the TGF-beta signaling pathway.

**ALTERNATE NAMES:** MADH2; MADR2; Mothers against decapentaplegic homolog 2; MAD homolog 2; Mothers against DPP homolog 2; JV18-1; Mad-related protein 2; hMAD-2; SMAD family member 2; SMAD 2; Smad2; hSMAD2

**ANTIBODY TYPE:** Polyclonal

**HOST/ISOTYPE:** Rabbit / IgG

**IMMUNOGEN:** KLH-conjugated synthetic peptide targeting a sequence within the C-term region of human SMAD2

**MOLECULAR WEIGHT:** 60 kDa

**PURIFICATION:** Affinity purified

**FORM:** Liquid

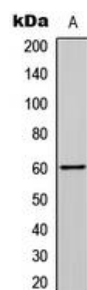
**FORMULATION:** In 0.42% Potassium phosphate; 0.87% NaCl; pH 7.3; 30% glycerol; and 0.01% sodium azide

**SPECIES REACTIVITY:** Human, Mouse, Monkey, Chicken, Rat, Porcine, Rabbit, Sheep, Bovine, Zebrafish

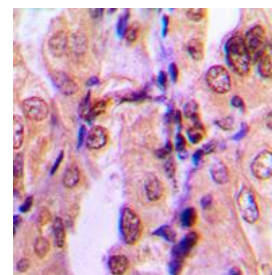
**STORAGE CONDITIONS:** Store at -20°C. Avoid freeze / thaw cycles

**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 SMAD2 (Ser465) expression in HepG2 (A) whole cell lysates.



Immunohistochemical analysis of phospho SMAD2 (Ser465) 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-SMAD2/3 Antibody (A1214)

Anti-TGF-β1 Antibody (A1456)

Anti-Smad4 Rabbit Monoclonal Antibody (A1605)

Anti-SMAD5 Antibody (4B10-B10-B6) (A1339)