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## Smad2 Rabbit pAb

Catalog Number: bs-0718R

Target Protein: Smad2

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: WB (1:500-2000), IHC-P (1:100-500), IHC-F (1:100-500), IF (1:100-500), Flow-Cyt (1µg/Test)

Reactivity: Human, Mouse, Rat (predicted:Rabbit, Cow, Chicken, Dog)

Predicted MW: 52 kDa

Entrez Gene: 4087

Swiss Prot: Q15796

Source: KLH conjugated synthetic peptide derived from human Smad2: 21-120/467.

Purification: affinity purified by Protein A

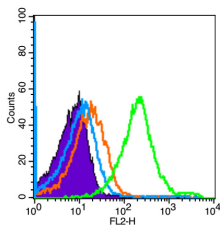

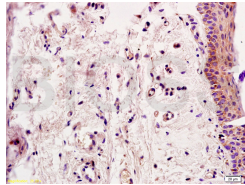
Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

**Background:** The protein encoded by this gene belongs to the SMAD, a family of proteins similar to the gene products of the Drosophila gene 'mothers against decapentaplegic' (Mad) and the C. elegans gene Sma. SMAD proteins are signal transducers and transcriptional modulators that mediate multiple signaling pathways. This protein mediates the signal of the transforming growth factor (TGF)-beta, and thus regulates multiple cellular processes, such as cell proliferation, apoptosis, and differentiation. This protein is recruited to the TGF-beta receptors through its interaction with the SMAD anchor for receptor activation (SARA) protein. In response to TGF-beta signal, this protein is phosphorylated by the TGF-beta receptors. The phosphorylation induces the dissociation of this protein with SARA and the association with the family member SMAD4. The association with SMAD4 is important for the translocation of this protein into the nucleus, where it binds to target promoters and forms a transcription repressor complex with other cofactors. This protein can also be phosphorylated by activin type 1 receptor kinase, and mediates the signal from the activin. Alternatively spliced transcript variants have been observed for this gene. [provided by RefSeq, May 2012]

Western blot analysis of Smad2 phosphorylation. The blot shows Smad2 protein levels across 12 lanes. Molecular weight markers (180, 100, 75, 60, 45, 35, 25 kDa) are indicated on the left. The lanes are labeled as follows: Control (M), Transf (M), Transf (H), Control (M), Control (H), Control (H), Control (H), Control (H), Control (H), Control (H), Control (H), and Control (H). The blot shows a strong band at approximately 60 kDa for Smad2, with varying intensities across the lanes, indicating phosphorylation status.

Tissue/cell: rat skin tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-Smad2 Polyclonal Antibody, Unconjugated(bs-0718R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.