

## Smad2 (phospho Ser250) rabbit pAb

Cat No.:ES6154

For research use only

## Overview

Product Name Smad2 (phospho Ser250) rabbit pAb

Host species Rabbit

Applications WB;ELISA;IHC Species Cross-Reactivity Human;Mouse;Rat

**Recommended dilutions** WB 1:500-2000;IHC-p 1:50-300; ELISA 2000-20000 **Immunogen** The antiserum was produced against synthesized

peptide derived from human Smad2 around the phosphorylation site of Ser250. AA range:216-265 Phospho-Smad2 (S250) Polyclonal Antibody detects

**Specificity** Phospho-Smad2 (S250) Polyclonal Antibody detects endogenous levels of Smad2 protein only when

endogenous levels of Sinauz protein only when

phosphorylated at S250.

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and

0.02% sodium azide.

Storage Store at -20°C. Avoid repeated freeze-thaw cycles.

Protein Name Mothers against decapentaplegic homolog 2

Gene Name SMAD2

**Cellular localization** Cytoplasm . Nucleus . Cytoplasmic and nuclear in

the absence of TGF-beta. On TGF-beta stimulation, migrates to the nucleus when complexed with SMAD4 (PubMed:9865696, PubMed:21145499). On

dephosphorylation by phosphatase PPM1A,

released from the SMAD2/SMAD

**Purification** The antibody was affinity-purified from rabbit

antiserum by affinity-chromatography using

epitope-specific immunogen.

Clonality Polyclonal
Concentration 1 mg/ml
Observed band 65kD
Human Gene ID 4087
Human Swiss-Prot Number Q15796

Alternative Names SMAD2; MADH2; MADR2; Mothers against

decapentaplegic homolog 2; MAD homolog 2; Mothers against DPP homolog 2; JV18-1;



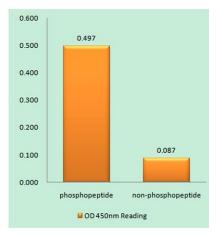
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**Background** 

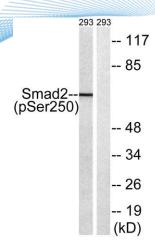
Mad-related protein 2; hMAD-2; SMAD family member 2; SMAD 2; Smad2; hSMAD2 The protein encoded by this gene belongs to the SMAD, a family of proteins similar to the gene products of the Drosophila gene 'mothers against decapentaplegic' (Mad) and the C. elegans gene Sma. SMAD proteins are signal transducers 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



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Smad2 (Phospho-Ser250) Antibody







Western blot analysis of lysates from 293 cells treated with PMA 125ng/ml 30', using Smad2 (Phospho-Ser250) Antibody. The lane on the right is blocked with the phospho peptide.



Immunohistochemical analysis of paraffin-embedded human liver cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).

