



Smad2/3 rabbit pAb

Cat#: orb766336 (Manual)

For research use only. Not intended for diagnostic use.

Product Name Smad2/3 rabbit pAb

Host species Rabbit

Applications WB;IHC;IF;ELISA

Species Cross-Reactivity Human; Mouse; Rat; Monkey

Recommended dilutions Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA:

1/10000. Not yet tested in other applications.

Immunogen The antiserum was produced against synthesized peptide derived from

human Smad2/3. AA range:1-50

Smad2/3 Polyclonal Antibody detects endogenous levels of Smad2/3 protein. **Specificity**

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium

azide..

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

Protein Name Mothers against decapentaplegic homolog 2/3

Gene Name SMAD2/SMAD3

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/SMAD4 complex, and

exported out of the nucleus by interaction with RANBP1 (PubMed:16751101, PubMed:19289081). Localized mainly to the nucleus in the early stages of embryo development with expression becoming evident in

the cytoplasm at the blastocyst and epiblast stages (By similarity). .





Purification The antibody was affinity-purified from rabbit antiserum by affinity-

epitope-specific immunogen. chromatography using

Polyclonal **Clonality**

Concentration 1 mg/ml

Observed band 48kD

Human Gene ID 4087/4088

Human Swiss-Prot Number O15796/P84022

Alternative Names

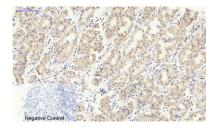
SMAD2; MADH2; MADR2; Mothers against decapentaplegic homolog 2; MAD homolog 2; Mothers against DPP homolog 2; JV18-1; Mad-related protein 2; hMAD-2; SMAD family member 2; SMAD 2; Smad2; hSMAD2; SMAD3; MADR3; MADR

SMAD3; MADH3; Mothers against decapentaplegic

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

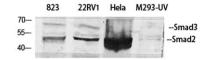


Immunohistochemical analysis of paraffin-embedded Human-stomach tissue. 1,Smad2/3 Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(roo

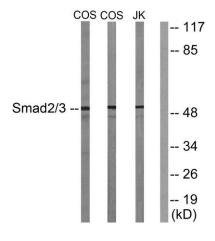




explore, bioreagents



Western Blot analysis of various cells using Smad2/3 Polyclonal Antibody diluted at 1:500



Western blot analysis of lysates from COS7 and Jurkat cells, treated with UV 15', using Smad2/3 Antibody. The lane on the right is blocked with the synthesized peptide.