

SMAD2 (phospho S250) polyclonal antibody

Catalog # PAB31669

Size 100 uL

Specification

Product Description Rabbit polyclonal antibody raised against synthetic peptide of human SMAD2 (phospho S250).

Immunogen A synthetic peptide corresponding to amino acids 190-270 of human SMAD2 (phospho S250).

Host Rabbit

Reactivity Human, Mouse, Rat

Specificity This antibody detects endogenous levels of Smad2 protein only when phosphorylated at S250.

Form Liquid

Purification Affinity purification

Isotype IgG

Recommend Usage ELISA (1:10000)
Western Blot (1:500-2000)
The optimal working dilution should be determined by the end user.

Storage Buffer In PBS (50% glycerol, 0.5% BSA and 0.02% sodium azide).

Storage Instruction Store at -20°C.
Aliquot to avoid repeated freezing and thawing.

Note This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot
- Enzyme-linked Immunoabsorbent Assay

Gene Info — SMAD2

Entrez GeneID [4087](#)

Protein Accession# [Q15796](#)

Gene Name SMAD2

Gene Alias JV18, JV18-1, MADH2, MADR2, MGC22139, MGC34440, hMAD-2, hSMAD2

Gene Description SMAD family member 2

Omim ID [601366](#)

Gene Ontology [Hyperlink](#)

Gene Summary

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 encoding the same protein have been observed. [provided by RefSeq]

Other Designations

MAD, mothers against decapentaplegic homolog 2|Mad protein homolog|Mad, mothers against decapentaplegic homolog 2|Mad-related protein 2|SMAD, mothers against DPP homolog 2|Sma- and Mad-related protein 2|mother against DPP homolog 2

Pathway

- [Adherens junction](#)
- [Cell cycle](#)
- [Colorectal cancer](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)
- [TGF-beta signaling pathway](#)

- [Wnt signaling pathway](#)

Disease

- [Adenocarcinoma](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Colitis](#)
- [Colorectal Neoplasms](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Hypertension](#)
- [Inflammatory Bowel Diseases](#)
- [Liver Cirrhosis](#)
- [Obesity](#)
- [Osteoporosis](#)
- [Ovarian Failure](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Polycystic Ovary Syndrome](#)
- [Puberty](#)
- [Thrombophilia](#)
- [Tobacco Use Disorder](#)