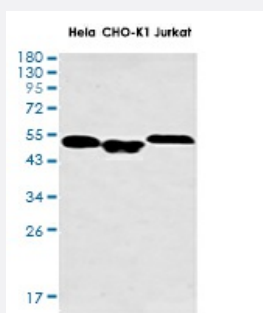


RecomAb™

SMAD2 recombinant monoclonal antibody, clone R03-3F8

Catalog # RAB01214 Size 100 uL

Applications



Western Blot

Western blot analysis of Smad2 in HeLa, CHO-K1, Jurkat lysates using Smad2 antibody

Specification

Product Description	Rabbit recombinant monoclonal antibody raised against human SMAD2.
Antibody Species	Rabbit
Immunogen	Original antibody is raised against synthetic peptide corresponding to human Smad2.
Theoretical MW (kDa)	Calculated MW: 52 kD
Reactivity	Human
Form	Liquid
Purification	Affinity purification
Isotype	IgG

Recommend Usage

Western Blot
Immunohistochemistry (Frozen sections)
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)
Immunocytochemistry
Immunofluorescence
Immunoprecipitation
The optimal working dilution should be determined by the end user.

Storage Buffer

In 50mM Tris-Glycine pH 7.4 (0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA)

Storage Instruction

Store at 4°C. For longer storage, aliquot and 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

Western blot analysis of Smad2 in Hela, CHO-K1, Jurkat lysates using Smad2 antibody

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

- Immunohistochemistry (Frozen sections)

- Immunocytochemistry

- Immunofluorescence

- Immunoprecipitation

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](#)