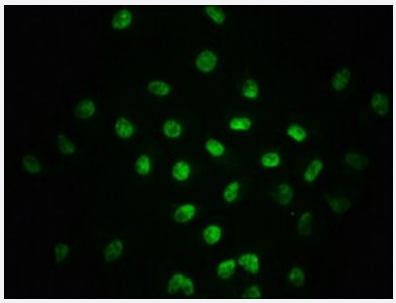
RecomAb™ Sm Size

SMAD2 (phospho S255) recombinant monoclonal antibody, clone 2A12

Catalog # RAB08086 Size 50 uL

Applications



Immunofluorescence

Immunofluorescent staining of A549 cells with SMAD2 (phospho S255) recombinant monoclonal antibody (diluated at 1:100). The secondary antibody was Alexa Fluor 488-congugated goat anti-rabbit IgG (green). Counter-stain DAPI was used (blue).

Specification

Product Description	Rabbit recombinant monoclonal antibody raised against human SMAD2.
Antibody Species	Rabbit
Immunogen	Original antibody is raised against a synthetic phosphopeptide corresponding to residues surroundin g S255 of human SMAD2.
Reactivity	Human
Form	Liquid
Preparation Method	Mammalian cell (HEK293) expression system
Purification	Affinity chromatography
Isotype	IgG
Recommend Usage	ELISA Immunofluorescence (1:20-1:200) The optimal working dilution should be determined by the end user.

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Storage Buffer	In PBS, pH7.4 (150mM NaCl, 50% glycerol and 0.02% sodium azide)
Storage Instruction	Store at -20 °C or -80 °C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

- Immunofluorescence

  Immunofluorescent staining of A549 cells with SMAD2 (phospho S255) recombinant monoclonal antibody (diluated at 1:100). The secondary antibody was Alexa Fluor 488-congugated goat anti-rabbit IgG (green). Counter-stain DAPI was used (blue).

- 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 pr oducts 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 differentia tion. This protein is recruited to the TGF-beta receptors through its interaction with the SMAD anc hor for receptor activation (SARA) protein. In response to TGF-beta signal, this protein is phosph orylated 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 i mportant for the translocation of this protein into the nucleus, where it binds to target promoters an d forms a transcription repressor complex with other cofactors. This protein can also be phosphor ylated by activin type 1 receptor kinase, and mediates the signal from the activin. Alternatively spli ced transcript variants encoding the same protein have been observed. [provided by RefSeq

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Other Designations	MAD, mothers against decapentaplegic homolog 2|Mad protein homolog|Mad, mothers against d ecapentaplegic 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

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- Pancreatic cancer
- Pancreatic Neoplasms
- Polycystic Ovary Syndrome
- Puberty
- Thrombophilia
- Tobacco Use Disorder

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