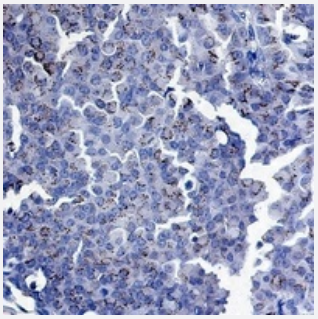
RecomAb™

SMAD3 recombinant monoclonal antibody

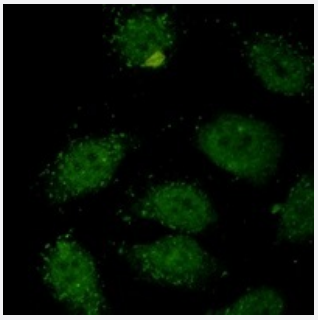
Catalog # RAB02426 Size 100 uL

Applications



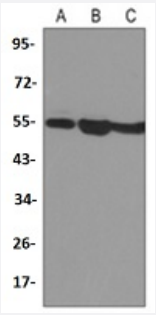
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of human breast carcinoma formalin fixed paraffin embedded tissue section using SMAD3 recombinant monoclonal antibody (Cat # RAB02426). The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.5). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescence

Immunofluorescent analysis of A549 cells with SMAD3 recombinant monoclonal antibody (Cat # RAB02426). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark.



Western Blot (Cell lysate)

Western blot analysis of Jurkat (A), C6 (B), Hela (C) whole cell lysates with SMAD3 recombinant monoclonal antibody (Cat # RAB02426).

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Specification

Product Description	Rabbit recombinant monoclonal antibody raised against recombinant SMAD3.
Antibody Species	Rabbit
Immunogen	Original antibody is raised against a synthetic peptide of human Smad3.
Theoretical MW (kDa)	55
Reactivity	Human, Rat
Specificity	Recognizes endogenous levels of SMAD3 protein.
Form	Liquid
Preparation Method	Mammalian cell (HEK293) expression system
Purification	Immunogen affinity chromatography
Isotype	IgG
Recommend Usage	Immunocytochemistry (1:50-1:100) Immunofluorescence (1:50-1:100) Immunohistochemistry (1:50-1:100) Western Blot (1:500-1:1000)
Storage Buffer	In 50mM Tris-Glycine, pH 7.4 (0.15M NaCl, 50% Glycerol, 0.01% Sodium azide and 0.05% BSA)
Storage Instruction	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

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

  Immunohistochemical analysis of human breast carcinoma formalin fixed paraffin embedded tissue section using SMAD3 recombinant monoclonal antibody (Cat # RAB02426). The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.5). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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- Immunofluorescence

  Immunofluorescent analysis of A549 cells with SMAD3 recombinant monoclonal antibody (Cat # RAB02426). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark.

- Immunocytochemistry

- Western Blot (Cell lysate)

  Western blot analysis of Jurkat (A), C6 (B), Hela (C) whole cell lysates with SMAD3 recombinant monoclonal antibody (Cat # RAB02426).

Gene Info — SMAD3

Entrez GeneID	4088
Protein Accession#	P84022
Gene Name	SMAD3
Gene Alias	DKFZp586N0721, DKFZp686J10186, HSPC193, HsT17436, JV15-2, MADH3, MGC60396
Gene Description	SMAD family member 3
Omim ID	603109
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 functions as a transcriptional modulator activated by transforming growth factor-beta and is thought to play a role in the regulation of carcinogenesis. [provided by R efSeq
Other Designations	MAD, mothers against decapentaplegic homolog 3|SMA- and MAD-related protein 3|SMAD, mot hers against DPP homolog 3|mad homolog JV15-2|mad protein homolog|mothers against decap entaplegic homolog 3

Pathway

- Adherens junction
- Cell cycle

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- Chronic myeloid leukemia
- Colorectal cancer
- Pancreatic cancer
- Pathways in cancer
- TGF-beta signaling pathway
- Wnt signaling pathway

Disease

- Alzheimer disease
- Anemia
- Asthma
- Bacteremia
- Breast cancer
- Breast Neoplasms
- Cleft Lip
- Cleft Palate
- Coronary Artery Disease
- Crohn Disease
- Diabetes Mellitus
- Diabetic Nephropathies
- Genetic Predisposition to Disease
- Graft vs Host Disease
- Head and Neck Neoplasms
- Hypersensitivity
- Hypertension
- Keloid

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- Kidney Failure
- Liver Cirrhosis
- Neoplasm Recurrence
- Neoplasms
- Obesity
- Occupational Diseases
- Osteoarthritis
- Osteoporosis
- Ovarian cancer
- Ovarian Failure
- Ovarian Neoplasms
- Pancreatic cancer
- Pancreatic Neoplasms
- Polycystic Ovary Syndrome
- Prostate cancer
- Prostatic Neoplasms
- Puberty
- Pulmonary Disease
- Thrombophilia
- Tobacco Use Disorder

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