

Product Name: Smad3(4C9)Mouse Monoclonal Antibody**Catalog #: AMM17995**

For research use only.

Summary

Description	Mouse monoclonal Antibody
Host	Mouse
Application	WB,IHC,ICC/IF
Reactivity	Human,Rat,Mouse
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Monoclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1000-1:2000,IHC 1:200-1:1000,ICC/IF 1:50-1:200
Molecular Weight	52kDa

Antigen Information

Gene Name	SMAD3
Alternative Names	SMAD3
Gene ID	4088.0
SwissProt ID	P84022
Immunogen	Synthetic Peptide of Smad3 at AA range of 350-430

Background

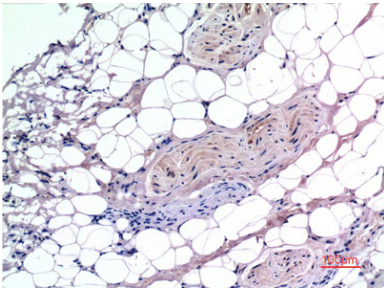
The protein encoded by this gene belongs to the SMAD, a family of proteins similar to the gene products of the Drosophila gene 'mothers against decapentaplegic' (Mad) and the C. elegans gene Sma. SMAD proteins are signal transducers and

transcriptional modulators that mediate multiple signaling pathways. This protein 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 RefSeq, Apr 2009],disease:Defects in SMAD3 may be a cause of colorectal cancer (CRC) [MIM:114500],,domain:The MH2 domain is sufficient to carry protein nuclear export,,function:Transcriptional modulator activated by TGF-beta (transforming growth factor) and activin type 1 receptor kinase. SMAD3 is a receptor-regulated SMAD (R-SMAD),,PTM:Phosphorylated on serine by TGF-beta and activin type 1 receptor kinases,,similarity:Belongs to the dwarfin/SMAD family,,similarity:Contains 1 MH1 (MAD homology 1) domain,,similarity:Contains 1 MH2 (MAD homology 2) domain,,subcellular location:In the cytoplasm in the absence of ligand. Migration to the nucleus when complexed with Smad4,,subunit:Interacts with HGS. Interacts with NEDD4L in response to TGF-beta. Interacts with TTRAP (By similarity). Interacts with SARA (SMAD anchor for receptor activation); form trimers with another SMAD3 and the co-SMAD SMAD4. Interacts with JUN/FOS, vitamin D receptor, homeobox protein TGIF and TGIF2, PEBP2-alpha C subunit, CREB-binding protein (CBP), p300, SKI, SNON, ATF2, SMURF2, AIP1, DACH1 and TGFB1I1. Part of a complex consisting of AIP1, ACVR2A, ACVR1B and SMAD3. Found in a complex with SMAD2 and TRIM33 upon addition of TGF-beta. Interacts with SMAD2 and TRIM33. Found in a complex with SMAD3, Ran and XPO4. Interacts with XPO4. Interacts with LBXCOR1 and CORL2.,

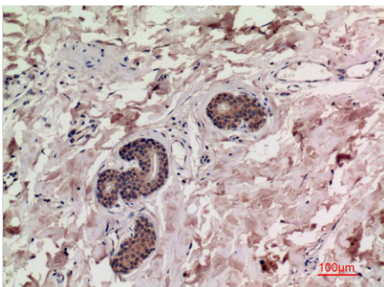
Research Area

Cell_Cycle_G1S;Cell_Cycle_G2M_DNA;WNT;WNT-T CELLTGF-beta;Adherens_Junction;Pathways in cancer;Colorectal cancer;Pancreatic cancer;Chronic myeloid leukemia;

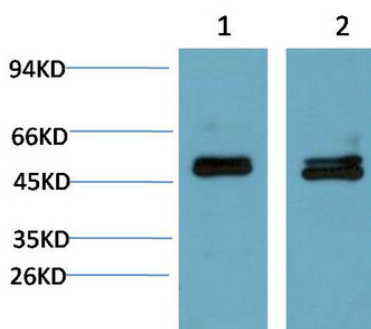
Image Data



Immunohistochemical analysis of paraffin-embedded Human Liver Carcinoma Tissue using Smad3 Mouse mAb diluted at 1:200.



Immunohistochemical analysis of paraffin-embedded Human Breast Carcinoma Tissue using Smad3 Mouse mAb diluted at 1:200.



Western blot analysis of 1) Mouse Brain Tissue Lysate, 2) Rat Brain Tissue Lysate using Smad3 Mouse mAb diluted at 1:2000.