



Smad3 Polyclonal Antibody

E20-53417

Catalog Number:E20-53417

Product name:Smad3 Polyclonal Antibody

Amount:100ul

Applications:WB,IHC-p

Reactivity:Human,Mouse,Rat

Gene Name:SMAD3

Protein Name:Mothers against decapentaplegic homolog 3

Human Gene Id:4088

Human Swiss Prot No:P84022

Mouse Swiss Prot No:Q8BUN5

Rat Swiss Prot No:P84025

Immunogen:Synthesized peptide derived from human Smad3 around the non-phosphorylation site oS213.

Specificity:The antibody detects endogenous Smad3 protein.

Formulation:PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.

Source:Rabbit

Dilution:Western Blot: 1/500 - 1/2000.IHC-p:1:50-300. Not yet tested in other applications.

Purification:The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Storage Stability:-20°C/1 year

Other Names:SMAD3; MADH3; Mothers against decapentaplegic homolog 3; MAD homolog 3; Mad3; Mothers against DPP homolog 3; hMAD-3; JV15-2; SMAD family member 3; SMAD 3; Smad3; hSMAD3

Observed Band(KD):50

Background:SMAD family member 3(SMAD3) Homo sapiens 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

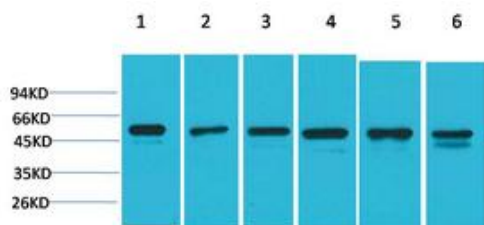
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transcriptional modulators that mediate multiple signaling pathways. This protein functions as a transcriptional modulator activated by transforming growth factor-beta and is thought to play a role in the regulation of carcinogenesis. [provided by RefSeq, Apr 2009].

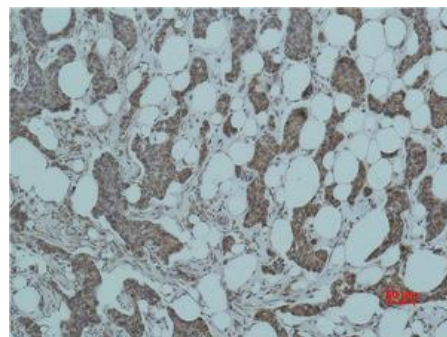
Function:disease:Defects in SMAD3 may be a cause of colorectal cancer (CRC) [MIM:114500].,domain:The MH2 domain is sufficient to carry protein nuclear export.,function:Transcriptional modulator activated by TGF-beta (transforming growth factor) and activin type 1 receptor kinase. SMAD3 is a receptor-regulated 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.

Subcellular Location:nuclear chromatin,intracellular,nucleus,nuclear inner membrane, nucleoplasm, transcription factor complex, cytoplasm,cytosol,plasma membrane,receptor complex,SMAD protein complex,SMAD2-SMAD3 protein complex.

Expression:Brain,Colon carcinoma,Esophagus tumor,Pancreas,Placenta,Spleen,Umbilical cord.



Western blot analysis of 1) A431, 2) HeLa, 3) C2C12, 4) 3T3, 5) PC12, 6) Rat Brain Tissue using Smad3 Polyclonal Antibody. Secondary antibody was diluted at 1:20000.



Immunohistochemical analysis of paraffin-embedded human Breast carcinoma using Smad3 Polyclonal Antibody.