



## Smad3 Polyclonal Antibody

E20-53418

**Catalog Number:**E20-53418**Product name:**Smad3 Polyclonal Antibody**Amount:**100ul**Applications:**WB,IHC-p**Reactivity:**Human,**Gene Name:**SMAD3**Protein Name:**Mothers against decapentaplegic homolog 3**Human Gene Id:**4088**Human Swiss Prot No:**P84022**Mouse Swiss Prot No:**Q8BUN5**Immunogen:**Synthesized peptide derived from human Smad3 around the non-phosphorylation site ofS213.**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 transcriptional modulators that mediate multiple signaling pathways. This protein functions as a

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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.

**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.

