

## Smad1 (Phospho Ser214) rabbit pAb

Catalog No: YP1577

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC

Target: Smad1

**Fields:** >>TGF-beta signaling pathway;>>Hippo signaling pathway;>>Signaling

pathways regulating pluripotency of stem cells;>>Transcriptional misregulation in

cancer

Gene Name: SMAD1 BSP1 MADH1 MADR1

Q15797

P70340

Protein Name: Smad1 (Phospho Ser214)

Human Gene Id: 4086

**Human Swiss Prot** 

No:

Mouse Gene Id: 17125

**Mouse Swiss Prot** 

No:

Rat Swiss Prot No: P97588

Immunogen: Synthesized peptide derived from human Smad1 (Phospho Ser214)

**Specificity:** This antibody detects endogenous levels of Human, Mouse, Rat Smad1

(Phospho Ser214)

**Formulation:** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, lgG

**Dilution:** WB 1:500-2000;IHC 1:50-300

**Purification:** The antibody was affinity-purified from rabbit serum by affinity-chromatography

1/3



using specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 51kD

**Background:** function:Transcriptional modulator activated by BMP (bone morphogenetic

proteins) type 1 receptor kinase. SMAD1 is a receptor-regulated SMAD (R-

SMAD).,PTM:Phosphorylated on serine by BMP type 1 receptor

kinase.,PTM:Ubiquitin-mediated proteolysis by SMAD-specific E3 ubiquitin ligase SMURF1.,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:Cytoplasmic in the absence of ligand. Migrates to the nucleus when complexed with SMAD4.,subunit:Interacts with HGS, NANOG and ZCCHC12 (By similarity). May form trimers with another SMAD1 and the co-SMAD SMAD4. Interacts with PEBP2-alpha subunit, CREB-binding protein (CBP), p300, SMURF1, SMURF2 and HOXC8. Associates with ZNF423 or ZNF521 in response to BMP2 leading to activate transcription of BMP target genes. Interacts with LBXCOR1.,tissue specificity:Ubiquitous. Highest expression

seen in the heart and skeletal muscle.,

**Function:** MAPKKK cascade, skeletal system development, ossification, osteoblast

differentiation, urogenital system development, formation of primary germ layer, mesoderm formation, mesodermal cell fate commitment, kidney development, osteoblast fate commitment, transcription, regulation of

transcription, DNA-dependent, regulation of transcription from RNA polymerase II

promoter, RNA processing, protein complex assembly, defense response, inflammatory response, cell surface receptor linked signal

transduction, enzyme linked receptor protein signaling pathway, transmembrane receptor protein serine/threonine kinase signaling pathway, transforming growth

factor beta receptor signaling pathway, SMAD protein complex

assembly, intracellular signaling cascade, protein kinase cascade, gamete

generation, gastrulation, pattern specification process, mesoderm

development, negative regulation of cell proliferat

Subcellular Location:

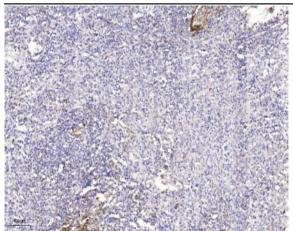
Cytoplasm . Nucleus . Cytoplasmic in the absence of ligand. Migrates to the nucleus when complexed with SMAD4 (PubMed:15647271). Co-localizes with LEMD3 at the nucleus inner membrane (PubMed:15647271). Exported from the

nucleus to the cytoplasm when dephosphorylated (By similarity). .

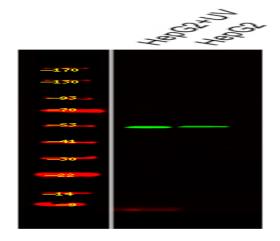
**Expression:** Ubiquitous. Highest expression seen in the heart and skeletal muscle.

## **Products Images**





Immunohistochemical analysis of paraffin-embedded human spleen. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).



Western Blot analysis of various, using primary antibody at 1:1000 dilution. Secondary antibody(catalog#:RS23920) was diluted at 1:10000