



Smad1 (Phospho Ser214) rabbit pAb

Catalog No	YP-Ab-10420
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC
Gene Name	SMAD1 BSP1 MADH1 MADR1
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,IgG
Purification	The antibody was affinity-purified from rabbit serum by affinity-chromatography using specific immunogen.
Dilution	WB 1:500-2000;IHC-p 1:50-300
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	p SMAD1;p SMAD1 (Ser214);p SMAD1 Ser214;Phospho SMAD1;Phospho SMAD1 (Ser214);Smad1;SMAD1 BSP1 MADH1 MADR1;Smad1 (Phospho Ser214);Mothers against decapentaplegic homolog 1 (MAD homolog 1;Mothers against DPP homolog 1;JV4-1;Mad-related protein 1;SMAD family member 1; SMAD 1;hSMAD1;Transforming growth factor-beta-signaling protein 1;BSP-1)
Observed Band	51kD
Calculated Molecular Weight	51kD
Cell Pathway	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). .
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 proliferation

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.,

matters needing attention

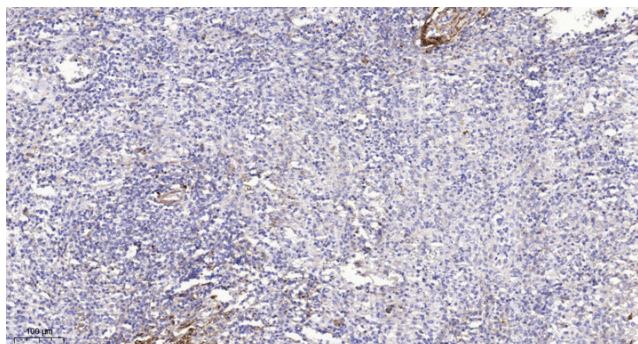
Avoid repeated freezing and thawing!

Usage suggestions

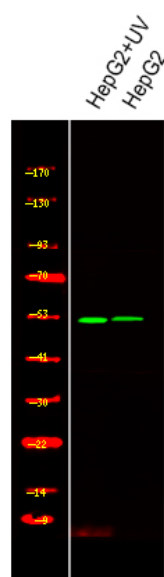
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



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