



Rabbit Anti-Human Smad1 Polyclonal Antibody (CABT-L2106)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Polyclonal Antibody to Mothers Against Decapentaplegic Homolog 1 (Knockout Validated)
Specificity	The antibody is a rabbit polyclonal antibody raised against Smad1. It has been selected for its ability to recognize Smad1 in immunohistochemical staining and western blotting.
Target	Smad1
Immunogen	Recombinant fragment corresponding to human SMAD1 (His270~Ser465)
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human, Bovine
Purification	Antigen-specific affinity chromatography followed by Protein A affinity chromatography
Conjugate	Unconjugated
Applications	WB
Format	Liquid
Concentration	Lot specific
Size	200 µg
Buffer	Supplied as solution form in 0.01M PBS with 50% glycerol, pH7.4.
Preservative	0.05% Proclin-300

Storage	Avoid repeated freeze/thaw cycles. Store at 4°C for frequent use. Aliquot and store at -20°C for 12 months.
Ship	4°C with ice bags

BACKGROUND

Introduction	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 mediates the signals of the bone morphogenetic proteins (BMPs), which are involved in a range of biological activities including cell growth, apoptosis, morphogenesis, development and immune responses. In response to BMP ligands, this protein can be phosphorylated and activated by the BMP receptor kinase. The phosphorylated form of this protein forms a complex with SMAD4, which is important for its function in the transcription regulation. This protein is a target for SMAD-specific E3 ubiquitin ligases, such as SMURF1 and SMURF2, and undergoes ubiquitination and proteasome-mediated degradation. Alternatively spliced transcript variants encoding the same protein have been observed. [provided by RefSeq, Jul 2008]
---------------------	---

Keywords	BSP1;JV4-1;JV41;MADH1;MADR1;SMAD Family Member 1;Mad-related protein 1;Transforming growth factor-beta-signaling protein 1;Mothers against DPP homolog 1
-----------------	--

GENE INFORMATION

Gene Name	SMAD1 SMAD family member 1 [Homo sapiens (human)]
Official Symbol	SMAD1
Synonyms	SMAD1; SMAD family member 1; BSP1; JV41; BSP-1; JV4-1; MADH1; MADR1; mothers against decapentaplegic homolog 1; MAD homolog 1; Mad-related protein 1; TGF-beta signaling protein 1; mothers against DPP homolog 1; SMAD, mothers against DPP homolog 1; MAD, mothers against decapentaplegic homolog 1; transforming growth factor-beta signaling protein 1; transforming growth factor-beta-signaling protein 1;
Entrez Gene ID	4086
Protein Refseq	NP_001003688
UniProt ID	Q15797
Chromosome Location	4q31
Pathway	ALK1 signaling events; ALK2 signaling events; Angiogenesis; BMP receptor signaling; BMP

signaling; BMP signalling and regulation; Delta-Notch Signaling Pathway; ErbB1 downstream signaling;

Function

I-SMAD binding; RNA polymerase II core promoter proximal region sequence-specific DNA binding; RNA polymerase II core promoter proximal region sequence-specific DNA binding transcription factor activity involved in positive regulation of transcription; RNA polymerase II core promoter sequence-specific DNA binding; co-SMAD binding; identical protein binding; metal ion binding; protein binding; protein kinase binding; receptor signaling protein activity; sequence-specific DNA binding transcription factor activity; transforming growth factor beta receptor, pathway-specific cytoplasmic mediator activity;
