



Anti-SMAD1 (full length) polyclonal antibody (DPAB-DC1885)

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

PRODUCT INFORMATION

Antigen Description

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.

Immunogen

SMAD1 (AAH01878.1, 1 a.a. ~ 465 a.a) full-length recombinant protein with GST tag. The sequence is
 MNVTSLSFTSPAVKRLLGWKQGDEEEKWAEKAVDALVKKLKKKGAMEELEKALSCPGQ
 PSNCVTPRSLDGRLQVSHRKGLPHVIYCRVWRWPDLQSHHELKPLECCEFPFGSKQKEV
 CINPYHYKRVESPVLPPVLVPRHSEYNPQHSLLAQFRNLGQNEPHMPLNATFPDSFQQPN
 SHPFPHSPNNSYPNSPGSSSSTYPHSPTSSDPGSPFQMPADTPPPAYLPPEDPMTQDGSQ
 PMDTNMMAPPLPSEINRGDVQAVAYEPPKHWCSIVYYELNNRVGEAFHASSTSVLDGFT
 DPSNNKNRFCGLLSNVNRNSTENTRRHIGKGVHLYVGGEVYAECLSDSSIFVQSRNC
 NYHHGFHPTTVCKIPSGCSLKIFNNQEFAQLLAQSVNHGE

Source/Host

Mouse

Species Reactivity

Human

Conjugate

Unconjugated

Applications

WB (Recombinant protein), ELISA,

Size	50 μ l
Buffer	50 % glycerol
Preservative	None
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

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; Angiogenesis; BMP signalling and regulation; ErbB1 downstream signaling
Function	I-SMAD binding; RNA polymerase II core promoter sequence-specific DNA binding; co-SMAD binding; identical protein binding