

Smad1 (phospho Ser187) rabbit pAb**Cat#: orb769027 (Manual)**

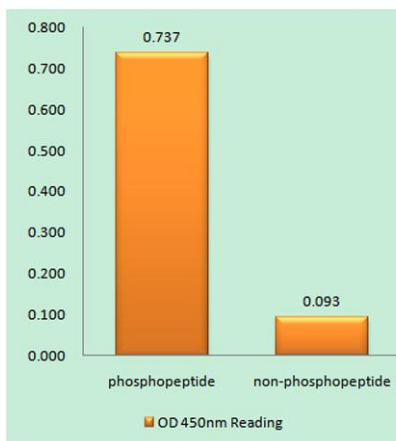
For research use only. Not intended for diagnostic use.

Product Name	Smad1 (phospho Ser187) rabbit pAb
Host species	Rabbit
Applications	WB;IHC;IF;ELISA
Species Cross-Reactivity	Human;Mouse;Monkey
Recommended dilutions	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications.
Immunogen	The antiserum was produced against synthesized peptide derived from human Smad1 around the phosphorylation site of Ser187. AA range:153-202
Specificity	Phospho-Smad1 (S187) Polyclonal Antibody detects endogenous levels of Smad1 protein only when phosphorylated at S187.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide..
Storage	Store at -20°C. Avoid repeated freeze-thaw cycles.
Protein Name	Mothers against decapentaplegic homolog 1
Gene Name	SMAD1
Cellular localization	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). .
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

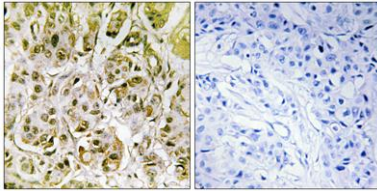
Clonality	Polyclonal
Concentration	1 mg/ml
Observed band	60kD
Human Gene ID	4086
Human Swiss-Prot Number	Q15797
Alternative Names	SMAD1; BSP1; MADH1; MADR1; Mothers against decapentaplegic homolog 1; MAD homolog 1; Mothers against DPP homolog 1; JV4-1; Mad-related protein 1; SMAD family member 1; SMAD 1; Smad1; hSMAD1; Transforming growth factor-beta-signaling protein

Background

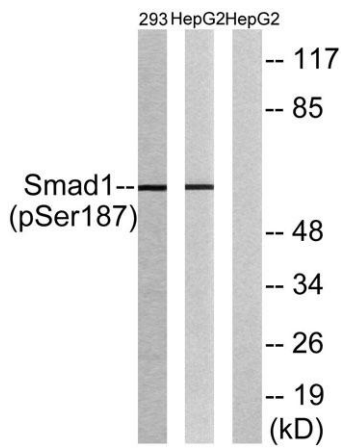
The protein encoded by this gene belongs to the SMAD, a family of proteins similar to the gene products of the Drosophila gene 'mothers against decapentaplegic' (Mad) and the C. elegans gene Sma. SMAD proteins are signal transducers and transcriptional modulators that mediate multiple signaling pathways. 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-med



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Smad1 (Phospho-Ser187) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using Smad1 (Phospho-Ser187) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from 293 cells and HepG2 cells, using Smad1 (Phospho-Ser187) Antibody. The lane on the right is blocked with the phospho peptide.