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Smad1 Antibody
Rabbit mAb
Catalog # AP90335

Specification

Smad1 Antibody - Product Information

Application	**WB, ICC**
Primary Accession	Q15797
Clonality	**Monoclonal**

Other Names
BSP-1; BSP1; Dwarfin-A; Dwf-A; JV4-1; MADH1; MADR1; Mad-related protein 1; Mad1; SMAD1; Smad1;

Isotype	**Rabbit IgG**
Host	**Rabbit**
Calculated MW	**52260 Da**

Smad1 Antibody - Additional Information

Purification	**Affinity-chromatography**
Immunogen	**A synthesized peptide derived from human Smad1**
Description	**Transcriptional modulator activated by BMP (bone morphogenetic proteins) type 1 receptor kinase. SMAD1 is a receptor-regulated SMAD (R-SMAD). SMAD1/OAZ1/PSMB4 complex mediates the degradation of the CREBBP/EP300 repressor SNIP1. May act synergistically with SMAD4 and YY1 in bone morphogenetic protein (BMP)-mediated cardiac-specific gene expression.**
Storage Condition and Buffer	**Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.**

Smad1 Antibody - Protein Information

Name SMAD1

Synonyms BSP1, MADH1, MADR1

Function
Transcriptional modulator that plays a role in various cellular processes, including embryonic development, cell differentiation, and tissue homeostasis (PubMed:9335504). Upon BMP ligand binding to their receptors at the cell surface, is phosphorylated by activated type I BMP

receptors (BMPRIs) and associates with SMAD4 to form a heteromeric complex which translocates into the nucleus acting as transcription factor (PubMed:33667543). In turn, the hetero-trimeric complex recognizes cis-regulatory elements containing Smad Binding Elements (SBEs) to modulate the outcome of the signaling network (PubMed:33667543). SMAD1/OAZ1/PSMB4 complex mediates the degradation of the CREBBP/EP300 repressor SNIP1. Positively regulates BMP4-induced expression of odontogenic development regulator MSX1 following IPO7-mediated nuclear import (By similarity).

Cellular Location
Cytoplasm. Nucleus Note=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) {ECO:0000250|UniProtKB:P70340, ECO:0000269|PubMed:15647271}

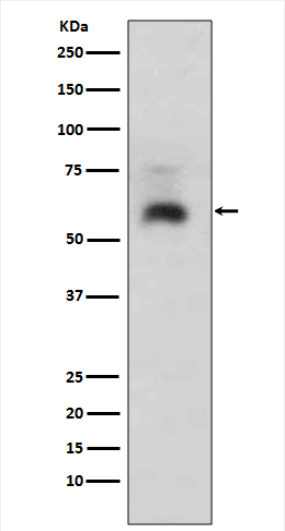
Tissue Location
Ubiquitous. Highest expression seen in the heart and skeletal muscle

Smad1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Smad1 Antibody - Images



Western blot analysis of Smad1 expression in HeLa cell lysate.