

**Smad1 Antibody**  
Rabbit mAb  
Catalog # AP90335

## Specification

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### Smad1 Antibody - Product Information

Application	WB, ICC
Primary Accession	<a href="#">Q15797</a>
Clonality	Monoclonal
<b>Other Names</b>	
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:<a href="http://www.uniprot.org/citations/9335504" target="\_blank">9335504</a>). Upon BMP ligand binding to their receptors at the cell surface, is phosphorylated by activated type I BMP

receptors (BMPRI) and associates with SMAD4 to form an heteromeric complex which translocates into the nucleus acting as transcription factor (PubMed:<a href="http://www.uniprot.org/citations/33667543" target="\_blank">33667543</a>). In turn, the hetero-trimeric complex recognizes cis-regulatory elements containing Smad Binding Elements (SBEs) to modulate the outcome of the signaling network (PubMed:<a href="http://www.uniprot.org/citations/33667543" target="\_blank">33667543</a>). 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

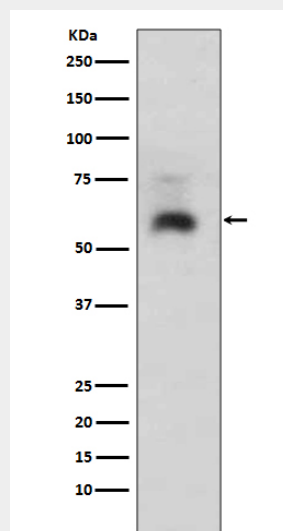
Ubiquitous. Highest expression seen in the heart and skeletal muscle

#### 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 Cytometry](#)
- [Cell Culture](#)

#### Smad1 Antibody - Images



Western blot analysis of Smad1 expression in HeLa cell lysate.