

**Anti-Smad1 Rabbit Monoclonal Antibody**  
Catalog # ABO13617

**Specification**

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**Anti-Smad1 Rabbit Monoclonal Antibody - Product Information**

Application	WB, IF, ICC
Primary Accession	<a href="#">Q15797</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Human, Mouse
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-Smad1 Rabbit Monoclonal Antibody . Tested in WB, ICC/IF applications. This antibody reacts with Human, Mouse.

**Anti-Smad1 Rabbit Monoclonal Antibody - Additional Information**

**Gene ID** 4086

**Other Names**

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 1, BSP-1, SMAD1, BSP1, MADH1, MADR1

**Calculated MW**

52260 MW KDa

**Application Details**

WB 1:500-1:2000<br>ICC/IF 1:50-1:200

**Subcellular Localization**

Cytoplasm. Nucleus. Cytoplasmic in the absence of ligand. Migrates to the nucleus when complexed with SMAD4. Co-localizes with LEMD3 at the nucleus inner membrane.

**Tissue Specificity**

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

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human Smad1

**Purification**

Affinity-chromatography

Storage

**Store at -20°C for one year. For short term**

storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

## Anti-Smad1 Rabbit Monoclonal 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 a 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

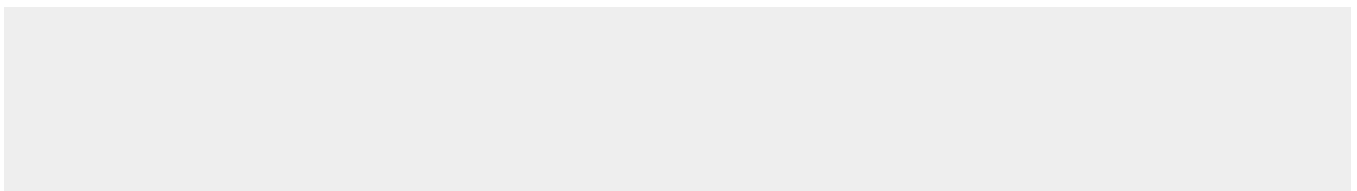
Ubiquitous. Highest expression seen in the heart and skeletal muscle

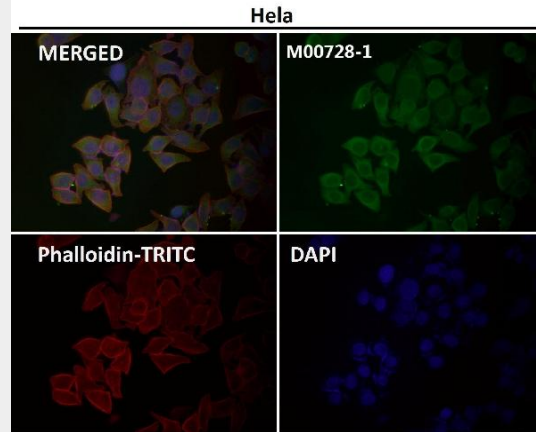
## Anti-Smad1 Rabbit Monoclonal Antibody - Protocols

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

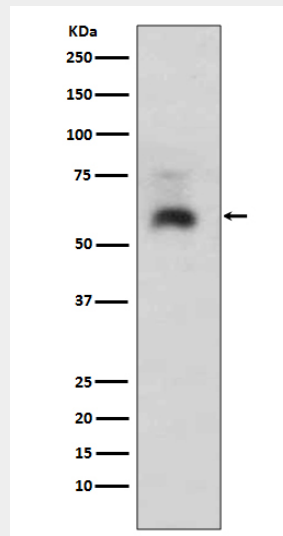
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-Smad1 Rabbit Monoclonal Antibody - Images

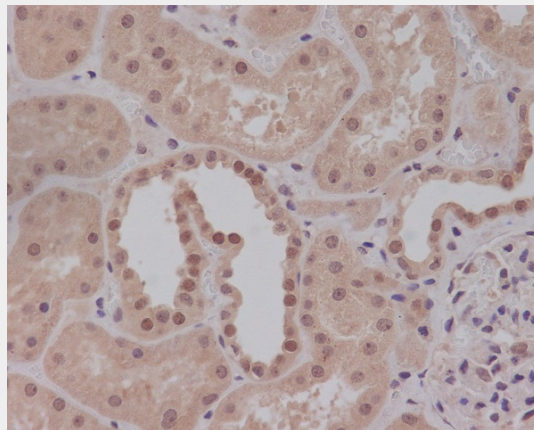




Immunofluorescent analysis using the Antibody at 1:50 dilution.



Western blot analysis of Smad1 expression in HeLa cell lysate.



Immunohistochemical analysis of paraffin-embedded human kidney, using Smad1 Antibody.