

# Smad1 Rabbit mAb

**Catalog # AP77440** 

# Specification

#### Smad1 Rabbit mAb - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

WB
<u>015797</u>
Human, Mouse
Rabbit
Monoclonal Antibody
52260

#### Smad1 Rabbit mAb - Additional Information

**Gene ID 4086** 

Other Names SMAD1

**Dilution** WB~~1/500-1/1000

Format Liquid

#### Smad1 Rabbit mAb - 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 (BMPRIs) 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

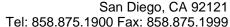
href="http://www.uniprot.org/citations/33667543" target=" blank">33667543</a>).

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

### Smad1 Rabbit mAb - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# Smad1 Rabbit mAb - Images

