

# Phospho-Smad1 (Ser463/Ser465) Rabbit mAb

Catalog # AP76366

## **Product Information**

ApplicationWB, IPPrimary AccessionQ15797ReactivityHuman, RatHostRabbit

**Clonality** Monoclonal Antibody

Calculated MW 52260

#### **Additional Information**

**Gene ID** 4086

Other Names SMAD1

**Dilution** WB~~1/500-1/1000 IP~~N/A

Format 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and

0.05% BSA.

**Storage** Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

# **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).

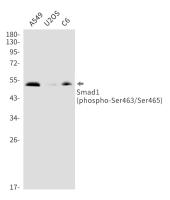
**Cellular Location** Cytoplasm. Nucleus Note=Cytoplasmic in the absence of ligand. Migrates to

the nucleus when complexed with SMAD4 (PubMed:15647271). Co-localizes with LEMD3 at the nucleus inner membrane (PubMed:15647271). Exported

## **Tissue Location**

Ubiquitous. Highest expression seen in the heart and skeletal muscle

# **Images**



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