

Phospho-Smad1 (Ser463/Ser465) Rabbit mAb

Catalog # AP76366

Specification

Phospho-Smad1 (Ser463/Ser465) Rabbit mAb - Product Information

Application WB
Primary Accession O15797
Reactivity Human, Rat
Host Rabbit

Clonality Monoclonal Antibody

Calculated MW 52260

Phospho-Smad1 (Ser463/Ser465) Rabbit mAb - Additional Information

Gene ID 4086

Other Names SMAD1

Dilution WB~~1/500-1/1000

Format Liquid

Phospho-Smad1 (Ser463/Ser465) 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: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



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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

Phospho-Smad1 (Ser463/Ser465) Rabbit mAb - Protocols

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

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

Phospho-Smad1 (Ser463/Ser465) Rabbit mAb - Images

