

Smad1 Rabbit mAb

Catalog # AP77558

Product Information

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| Application | WB, IHC-P, IF, FC, ICC |
| Primary Accession | Q15797 |
| Reactivity | Human |
| Host | Rabbit |
| Clonality | Monoclonal Antibody |
| Isotype | IgG |
| Conjugate | Unconjugated |
| Immunogen | A synthesized peptide derived from human Smad1 |
| Purification | Affinity Chromatography |
| Calculated MW | 52260 |

Additional Information

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| Gene ID | 4086 |
| Other Names | SMAD1 |
| Dilution | WB~~1/500-1/1000 IHC-P~~N/A IF~~1:50~200 FC~~1:10~50 ICC~~N/A |
| Format | Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol. |
| Storage | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles. |

Protein Information

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| Name | SMAD1 (HGNC:6767) |
| 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 (BMPRIIs) 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). |

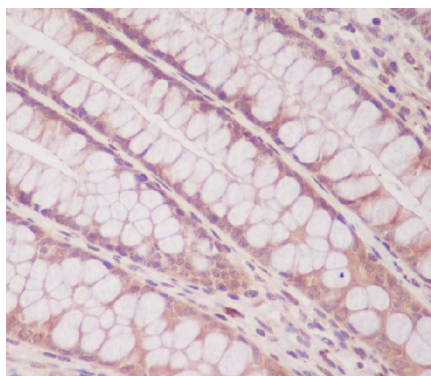
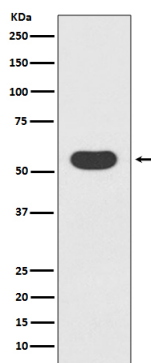
Cellular Location

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 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

Images



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