

SMAD1 Antibody (aa153-202)
Rabbit Polyclonal Antibody
Catalog # ALS15796**Specification**

SMAD1 Antibody (aa153-202) - Product Information

Application	IHC, IF, WB
Primary Accession	Q15797
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	52kDa KDa

SMAD1 Antibody (aa153-202) - 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

Target/Specificity

Smad1 Antibody detects endogenous levels of total Smad1 protein.

Reconstitution & Storage

Store at -20°C for up to one year.

Precautions

SMAD1 Antibody (aa153-202) is for research use only and not for use in diagnostic or therapeutic procedures.

SMAD1 Antibody (aa153-202) - 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 (BMPRIIs) and associates with SMAD4 to form an 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

Volume

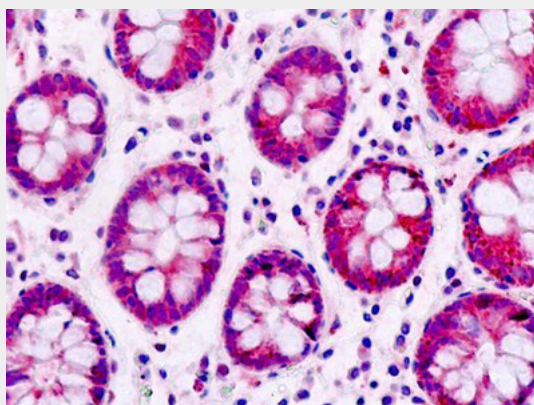
50 µl

SMAD1 Antibody (aa153-202) - Protocols

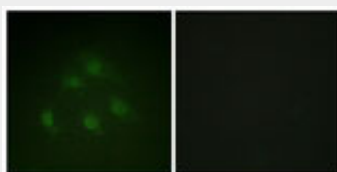
Provided below are standard protocols that you may find useful for product applications.

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

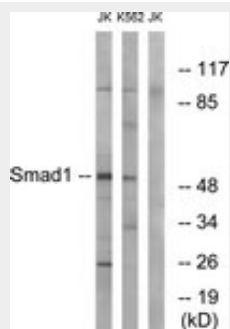
SMAD1 Antibody (aa153-202) - Images



Anti-SMAD1 antibody IHC staining of human intestine.



Immunofluorescence of HeLa cells, using Smad1 (Ab-187) Antibody.



Western blot of extracts from Jurkat/K562 cells, using Smad1 (Ab-187) Antibody.

SMAD1 Antibody (aa153-202) - Background

Transcriptional modulator activated by BMP (bone morphogenetic proteins) type 1 receptor kinase. SMAD1 is a receptor-regulated SMAD (R-SMAD). SMAD1/OAZ1/PSMB4 complex mediates the degradation of the CREBBP/EP300 repressor SNIP1. May act synergistically with SMAD4 and YY1 in bone morphogenetic protein (BMP)-mediated cardiac-specific gene expression.

SMAD1 Antibody (aa153-202) - References

- Riggins G.J.,et al.Nat. Genet. 13:347-349(1996).
- Liu F.,et al.Nature 381:620-623(1996).
- Hoodless P.A.,et al.Cell 85:489-500(1996).
- Lechleider R.J.,et al.J. Biol. Chem. 271:17617-17620(1996).
- Zhang Y.,et al.Nature 383:168-172(1996).