

# ARG51284 anti-Smad 1 antibody

Package: 100 μl, 50 μl Store at: -20°C

## Summary

Product Description	Rabbit Polyclonal antibody recognizes Smad 1
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	lgG
Target Name	Smad 1
Species	Human
Immunogen	Peptide sequence around aa. 461~465 (I-S-S-V-S) derived from Human Smad1.
Conjugation	Un-conjugated
Alternate Names	MADR1; Mad-related protein 1; Transforming growth factor-beta-signaling protein 1; Mothers against decapentaplegic homolog 1; MADH1; SMAD 1; Smad1; JV4-1; JV41; BSP-1; hSMAD1; BSP1; Mothers against DPP homolog 1; MAD homolog 1; SMAD family member 1

#### **Application Instructions**

Application table	Application	Dilution
	ICC/IF	1:100 - 1:200
	WB	1:250 - 1:1000
Application Note	* The dilutions indicate recomme should be determined by the scie	nded starting dilutions and the optimal dilutions or concentrations ntist.

### Properties

Form	Liquid
Purification	Antibodies were produced by immunizing rabbits with KLH-conjugated synthetic peptide. Antibodies were purified by affinity-chromatography using epitope-specific peptide.
Buffer	PBS (without Mg2+ and Ca2+, pH 7.4), 150mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

# Bioinformation

Database links	GenelD: 17125 Mouse
	GeneID: 4086 Human
	Swiss-port # P70340 Mouse
	Swiss-port # Q15797 Human
Gene Symbol	SMAD1
Gene Full Name	SMAD family member 1
Background	Transcriptional modulator activated by BMP (bone morphogenetic proteins) type 1 receptor kinase. SMAD1 is a receptor-regulated SMAD (R-SMAD).
Function	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. [UniProt]
Highlight	Related Antibody Duos and Panels: <u>ARG30155 Phospho Smad1 for Activation / Inhibition site Antibody Panel</u> Related products: <u>Smad 1 antibodies; Smad 1 Duos / Panels; Anti-Rabbit IgG secondary antibodies;</u>
Research Area	Cancer antibody; Developmental Biology antibody; Gene Regulation antibody; Metabolism antibody; Signaling Transduction antibody
Calculated Mw	52 kDa
PTM	Phosphorylation of the C-terminal SVS motif by BMP type 1 receptor kinase activates SMAD1 by promoting dissociation from the receptor and trimerization with SMAD4. Ubiquitinated by SMAD-specific E3 ubiquitin ligase SMURF1, leading to its degradation. Monoubiquitinated, leading to prevent DNA-binding. Deubiquitination by USP15 alleviates inhibition and promotes activation of TGF-beta target genes. Dephosphorylation, probably by PPM1A, induces its export from the nucleus to the cytoplasm (By similarity).

### Images



#### ARG51284 anti-Smad 1 antibody WB image

Western blot: Extracts from HeLa cells stained with ARG51284 anti-Smad 1 antibody.



#### ARG51284 anti-Smad 1 antibody ICC/IF image

Immunofluorescence: methanol-fixed HeLa cells stained with ARG51284 anti-Smad 1 antibody.