

## Product datasheet

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# ARG51794 anti-Smad 1 phospho (Ser465) antibody

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

#### **Summary**

Product Description Rabbit Polyclonal antibody recognizes Smad 1 phospho (Ser465)

Tested Reactivity Hu, Ms, Rat

Tested Application WB

Host Rabbit

**Clonality** Polyclonal

Isotype IgG

Target Name Smad 1

Species Human

Immunogen Peptide sequence around phosphorylation site of serine 465 (I-S-S-V-S(p)) 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
	WB	1:500 - 1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

#### **Properties**

Form

Purification	Antihodies were produced by immunizing rabbits with KIH-conjugated synthetic phosphopentide

Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. In addition, non-phospho specific antibodies were removed by chromatogramphy using non-

phosphopeptide.

Liquid

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 <u>GeneID: 17125 Mouse</u>

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:

ARG30155 Phospho Smad1 for Activation / Inhibition site Antibody Panel

Related products:

Smad 1 antibodies; Smad 1 Duos / Panels; Anti-Rabbit IgG secondary antibodies;

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

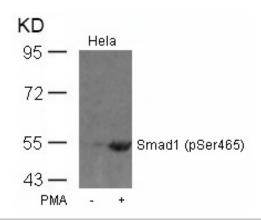
promoting dissociation from the receptor and trimerization with SMAD4.

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**



#### ARG51794 anti-Smad 1 phospho (Ser465) antibody WB image

Western blot: Extracts from HeLa cells untreated or treated with PMA stained with ARG51794 anti-Smad 1 phospho (Ser465) antibody.