

## Datasheet for ABIN933125

# anti-SMAD1 antibody



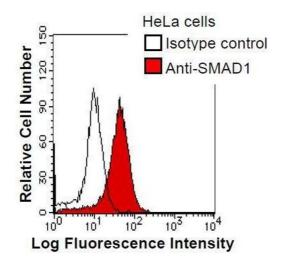


### Overview

Quantity:	100 μg
Target:	SMAD1
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Application:	Western Blotting (WB), Immunocytochemistry (ICC), Immunoprecipitation (IP), Flow Cytometry (FACS), Dot Blot (DB)
Product Details	
Immunogen:	SMAD1 antibody was raised in mouse using recombinant Human Smad Family Member 1 (Smad1)
Clone:	913C1b
Isotype:	lgG1
Cross-Reactivity:	Human, Mouse (Murine), Rat (Rattus)
Cross-Reactivity (Details):	Other species not studied.
Purification:	Protein G affinity chromatography
Target Details	
Target:	SMAD1
Alternative Name:	SMAD1 (SMAD1 Products)

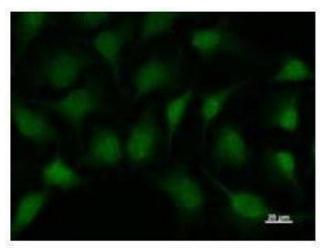
### **Target Details**

Background:	The protein encoded by this gene belongs to the SMAD, a family of proteins similar to the gene
	products of the Drosophila gene 'mothers against decapentaplegic' (Mad) and the C. elegans
	gene Sma. SMAD proteins are signal transducers and transcriptional modulators that mediate
	multiple signaling pathways. This protein mediates the signals of the bone morphogenetic
	proteins (BMPs), which are involved in a range of biological activities including cell growth,
	apoptosis, morphogenesis, development and immune responses. In response to BMP ligands,
	this protein can be phosphorylated and activated by the BMP receptor kinase. The
	phosphorylated form of this protein forms a complex with SMAD4, which is important for its
	function in the transcription regulation. Synonyms: Monoclonal SMAD1 antibody, Anti-SMAD1
	antibody, Transforming growth factor beta signaling protein 1 antibody, BSP1 antibody, JV41
	antibody, JV4-1 antibody, MADH1 antibody, MADR1 antibody.
Pathways:	Stem Cell Maintenance, Regulation of Muscle Cell Differentiation, Skeletal Muscle Fiber
	Development
Application Details	
Application Notes:	WB: 0.2-2 μg/mL, IP: 100-500 μg/sample, FC: 0.5-2 μg/sample, ICC: 2-100 μg/mL
	Optimal conditions should be determined by the investigator.
Restrictions:	For Research Use only
Handling	
Concentration:	Lot specific
Buffer:	SMAD1 antibody in PBS (3.0 mM KCl, 1.5 mM KH2 PO4 , 140 mM NaCl, 8.0 mM Na2 HPO4 (pH
	7.4)) containing 1 % bovine serum albumin (BSA) and 0.05 % sodium azide (NaN3 ).
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium Azide: a POISONOUS AND HAZARDOUS SUBSTANCE, which
	should be handled by trained staff only.
Handling Advice:	Avoid repeated freeze/thaw cycles.
	Dilute only prior to immediate use.
Storage:	4 °C/-20 °C
Storage Comment:	Store at 2-8 °C for up to one year. We recommend long term storage at -20 °C.
- g · · · · · · · · · · · · · ·	



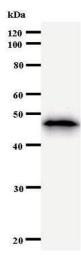
### **Flow Cytometry**

Image 1. HeLa cells were fixed in 2% paraformaldehyde/PBS and then permeabilized in 90% methanol. Cells were stained with anti-SMAD1 antibody (shaded) or isotype control (unshaded) followed by Alexa Fluor 488 conjugated goat anti-mouse IgG.



#### **Immunofluorescence**

**Image 2.** Immunostaining analysis in HeLa cells. HeLa cells were fixed with 4% paraformaldehyde and permeabilized with 0.01% Triton-X100 in PBS. The cells were immunostained with anti-SMAD1 antibody.



### **Western Blotting**

Image 3.