

## Datasheet for ABIN7270343

# anti-SMAD1 antibody





### Overview

Background:

Quantity:	100 μL
Target:	SMAD1
Reactivity:	Human
Host:	Rabbit
Clonality:	Monoclonal
Application:	Western Blotting (WB), Immunofluorescence (IF)
Product Details	
Purpose:	[KO Validated] Smad1 Rabbit mAb
Immunogen:	A synthesized peptide derived from human Smad1
Isotype:	IgG
Cross-Reactivity:	Human, Mouse
Characteristics:	Monoclonal Antibodies
Purification:	Affinity purification
Grade:	KO Validated
Target Details	
Target:	SMAD1
Alternative Name:	SMAD1 (SMAD1 Products)

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. This protein is a target for SMAD-specific E3 ubiquitin ligases, such as SMURF1 and SMURF2, and undergoes ubiquitination and proteasomemediated degradation. Alternatively spliced transcript variants encoding the same protein have been observed. [provided by RefSeq, Jul 2008],BSP-1;BSP1;JV4-1;JV41;MADH1;MADR1;Smad1;SMAD1,Cancer,Cell Biology & Developmental Biology,Epigenetics & Nuclear Signaling,ESC Pluripotency and Differentiation,Growth factors,Immunology & Inflammation,Signal Transduction,Stem Cells,TGF-b-Smad Signaling Pathway\_SMADs,Transcription Factors,SMAD1

Molecular Weight:	58kDa
Gene ID:	4086
UniProt:	Q15797
Pathways:	Stem Cell Maintenance, Regulation of Muscle Cell Differentiation, Skeletal Muscle Fiber  Development

## Application Details

Application Notes:	WB,1:500 - 1:2000,IF,1:50 - 1:200
Restrictions:	For Research Use only

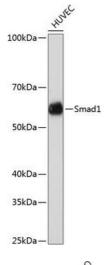
#### Handling

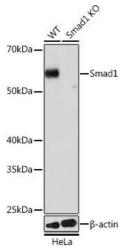
Format:	Liquid
Buffer:	PBS with 0.02 % sodium azide,0.05 % BSA,50 % glycerol, pH 7.3.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C

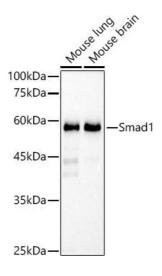
Storage Comment:

Store at -20°C. Avoid freeze / thaw cycles.

#### **Images**







#### **Western Blotting**

Image 1. Western blot analysis of extracts of HUVEC cells, using Smad1 antibody (ABIN7270343) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (ABIN1684268 and ABIN3020597) at 1:10000 dilution. Lysates/proteins: 25 μg per lane. Blocking buffer: 3 % nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 30s.

#### **Western Blotting**

Image 2. Western blot analysis of extracts from wild type (WT) and Smad1 knockout (KO) HeLa cells, using Smad1 antibody (ABIN7270343) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (ABIN1684268 and ABIN3020597) at 1:10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3 % nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 30s.

#### **Western Blotting**

**Image 3.** Western blot analysis of extracts of various cell lines, using Smad1 antibody (ABIN7270343) at 1:1000 dilution.293T cells were treated by UV at room temperature for 15-30 minutes.Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (ABIN1684268 and ABIN3020597) at 1:10000 dilution.Lysates/proteins: 25 µg per lane.Blocking buffer: 3 % nonfat dry milk in TBST.Detection: ECL Basic Kit (RM00020).Exposure time: 90s.

Please check the product details page for more images. Overall 7 images are available for ABIN7270343.