

# Datasheet for ABIN7263705

# anti-SMAD2 antibody





## Overview

Quantity:	200 μL
Target:	SMAD2
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SMAD2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF)
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#### **Product Details**

Immunogen:	A synthetic peptide of human SMAD2 (NP_001003652.1).
Isotype:	lgG
Specificity:	This antibody ist KO validated.
Characteristics:	Polyclonal Antibody
Purification:	Affinity purification
Grade:	KO Validated

# Target Details

Target:	SMAD2
Alternative Name:	SMAD2 (SMAD2 Products)
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 signal of the transforming growth factor (TGF)-beta, and thus regulates multiple cellular processes, such as cell proliferation, apoptosis, and differentiation. This protein is recruited to the TGF-beta receptors through its interaction with the SMAD anchor for receptor activation (SARA) protein. In response to TGF-beta signal, this protein is phosphorylated by the TGF-beta receptors. The phosphorylation induces the dissociation of this protein with SARA and the association with the family member SMAD4. The association with SMAD4 is important for the translocation of this protein into the nucleus, where it binds to target promoters and forms a transcription repressor complex with other cofactors. This protein can also be phosphorylated by activin type 1 receptor kinase, and mediates the signal from the activin. Alternatively spliced transcript variants have been observed for this gene.

Molecular Weight:

Observed\_MW: 60 kDa

Calculated\_MW: 48 kDa/52 kDa

Gene ID:

4087

UniProt:

Q15796

Pathways:

Cell Division Cycle, Hormone Transport, Chromatin Binding, Protein targeting to Nucleus

## **Application Details**

**Application Notes:** 

WB 1:500-1:2000 IHC 1:50-1:200 IF 1:50-1:200

Restrictions:

For Research Use only

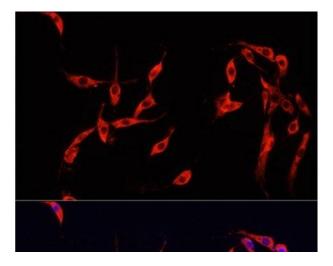
## Handling

Format:	Liquid
Concentration:	1 mg/mL
Buffer:	PBS with 0.02 % sodium azide, 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:

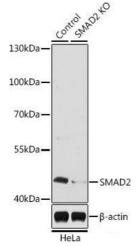
Store at -20°C. Avoid freeze / thaw cycles.

# **Images**



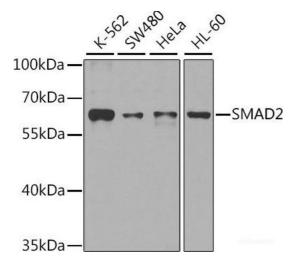
#### **Immunofluorescence**

**Image 1.** Immunofluorescence analysis of PC-12 cells using SMAD2 Polyclonal Antibody at dilution of 1:100. Blue: DAPI for nuclear staining.



# **Western Blotting**

**Image 2.** Western blot analysis of extracts from normal (control) and SMAD2 knockout (KO) HeLa cells using SMAD2 Polyclonal Antibody at dilution of 1:1000.



#### **Western Blotting**

**Image 3.** Western blot analysis of extracts of various cell lines using SMAD2 Polyclonal Antibody at dilution of 1:1000.

Please check the product details page for more images. Overall 6 images are available for ABIN7263705.