

Datasheet for ABIN7270344

anti-SMAD2 antibody

5 Images

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Overview

Quantity:	100 µL
Target:	SMAD2
Reactivity:	Human
Host:	Rabbit
Clonality:	Monoclonal
Conjugate:	This SMAD2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunoprecipitation (IP)

Product Details

Purpose:	[KO Validated] Smad2 Rabbit mAb
Immunogen:	A synthesized peptide derived from human Smad2
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Characteristics:	Monoclonal Antibodies
Purification:	Affinity purification
Grade:	KO Validated

Target Details

Target:	SMAD2
Alternative Name:	SMAD2 (SMAD2 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 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. [provided by RefSeq, May 2012],JV18;JV18-1;MADH2;MADR2;hMAD-2;hSMAD2;Smad2;SMAD2,Angiogenesis,Cancer,Cardiovascular,Cell Biology & Developmental Biology,Epigenetics & Nuclear Signaling,ESC Pluripotency and Differentiation,Growth factors,Protein phosphorylation,Signal Transduction,Stem Cells,TGF-b-Smad Signaling Pathway,TGF-b-Smad Signaling Pathway_SMADs,Transcription Factors,SMAD2
Molecular Weight:	58kDa
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,IF,1:50 - 1:200,IP,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

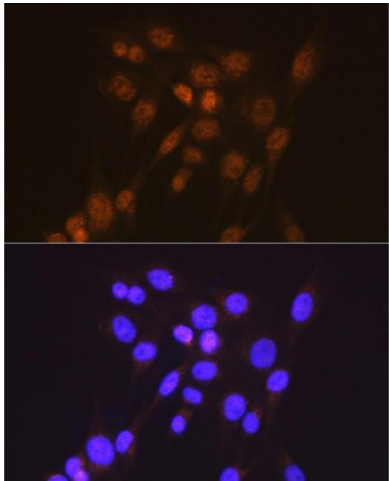
Handling

should be handled by trained staff only.

Storage: -20 °C

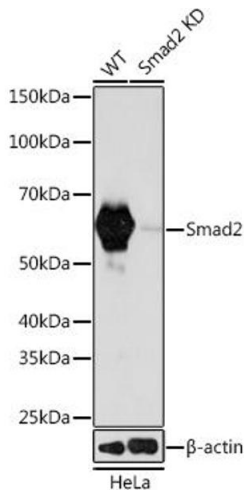
Storage Comment: Store at -20°C. Avoid freeze / thaw cycles.

Images



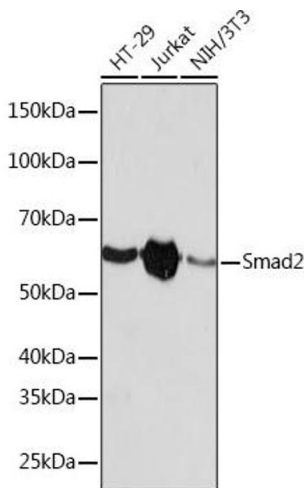
Immunofluorescence

Image 1. Immunofluorescence analysis of NIH-3T3 cells using [KO Validated] Smad2 Rabbit mAb (ABIN7270344) at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.



Western Blotting

Image 2. Western blot analysis of extracts from wild type (WT) and Smad2 knockdown (KD) HeLa cells, using Smad2 antibody (ABIN7270344) 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: 90s.



Western Blotting

Image 3. Western blot analysis of extracts of various cell lines, using Smad2 antibody (ABIN7270344) 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: 90s.

Images

Please check the [product details page](#) for more images. Overall 5 images are available for ABIN7270344.