

Datasheet for ABIN7209615
anti-SMAD2 antibody



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6 Images

Overview

Quantity:	100 µL
Target:	SMAD2
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SMAD2 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunofluorescence (IF), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Purpose:	Smad2 Polyclonal Antibody
Immunogen:	Synthesized peptide derived from human Smad2 around the non-phosphorylation site of S467
Isotype:	IgG
Specificity:	Smad2 Polyclonal Antibody detects endogenous levels of Smad2 protein.
Purification:	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen

Target Details

Target:	SMAD2
Alternative Name:	Smad2 (SMAD2 Products)

Target Details

Background: Rabbit Anti-Smad2 Polyclonal Antibody, SMAD2, MADH2, MADR2, Mothers against decapentaplegic homolog 2, MAD homolog 2, Mothers against DPP homolog 2, JV18-1, Mad-related protein 2, hMAD-2, SMAD family member 2, SMAD 2, Smad2, hSMAD2, The protein encoded by SMAD2 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., Mothers against decapentaplegic homolog 2

Gene ID: 4087

UniProt: [Q15796](#)

Pathways: [Cell Division Cycle](#), [Hormone Transport](#), [Chromatin Binding](#), [Protein targeting to Nucleus](#)

Application Details

Application Notes: Optimal working dilutions should be determined experimentally by the investigator. Suggested starting dilutions are as follows: WB (1:500-1:2000), IF (1:200-1:1000), IHC-P (1:100-1:300), ELISA (1:5000). Not yet tested in other applications.

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1 mg/mL

Buffer: PBS containing 50 % Glycerol, 0.5 % BSA and 0.02 % Sodium Azide.

Preservative: Sodium azide

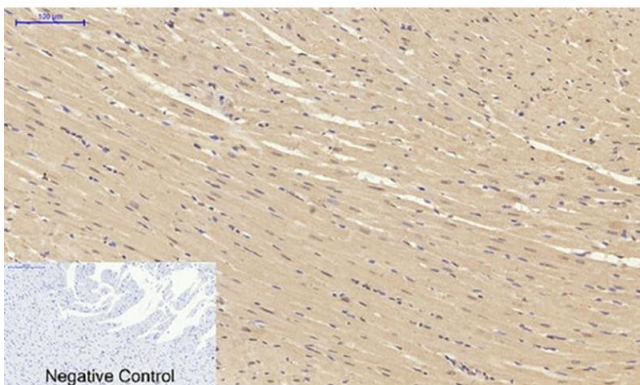
Handling

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: -20 °C

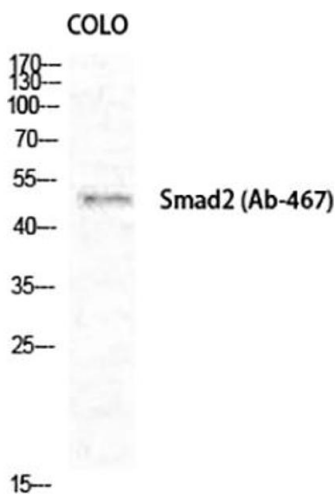
Storage Comment: Stable for one year at -20°C from date of shipment. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. Aliquot to avoid repeated freezing and thawing.

Images



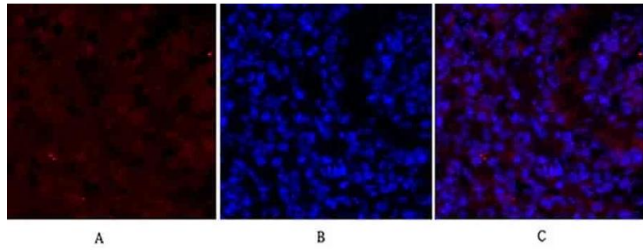
Immunohistochemistry

Image 1. Immunohistochemical analysis of paraffin-embedded rat heart tissue. 1, Smad2 Polyclonal Antibody was diluted at 1:200 (4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98 °C, 20 min). 3, secondary antibody was diluted at 1:200 (room temperature, 30 min). Negative control was used by secondary antibody only.



Western Blotting

Image 2. Western Blot analysis of COLO cells using Smad2 Polyclonal Antibody diluted at 1:1000.



Immunofluorescence

Image 3. Immunofluorescence analysis of Mouse lung tissue. 1, Smad2 Polyclonal Antibody (red) was diluted at 1:200 (4 °C, overnight). 2, Cy3 labeled secondary antibody was diluted at 1:300 (room temperature, 50 min). 3, Picture B: DAPI (blue) 10 min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B.

Please check the [product details page](#) for more images. Overall 6 images are available for ABIN7209615.