

Datasheet for ABIN7160238
anti-SMAD4 antibody (AA 27-195)[Go to Product page](#)

4 Images

Overview

Quantity:	100 µg
Target:	SMAD4
Binding Specificity:	AA 27-195
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SMAD4 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunoprecipitation (IP)

Product Details

Immunogen:	Recombinant Human Mothers against decapentaplegic homolog 4 protein (27-195AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified

Target Details

Target:	SMAD4
Alternative Name:	SMAD4 (SMAD4 Products)
Background:	Background: In muscle physiology, plays a central role in the balance between atrophy and hypertrophy. When recruited by MSTN, promotes atrophy response via phosphorylated

Target Details

SMAD2/4. MSTN decrease causes SMAD4 release and subsequent recruitment by the BMP pathway to promote hypertrophy via phosphorylated SMAD1/5/8. Acts synergistically with SMAD1 and YY1 in bone morphogenetic protein (BMP)-mediated cardiac-specific gene expression. Binds to SMAD binding elements (SBEs) (5'-GTCT/AGAC-3') within BMP response element (BMPRE) of cardiac activating regions. Common SMAD (co-SMAD) is the coactivator and mediator of signal transduction by TGF-beta (transforming growth factor). Component of the heterotrimeric SMAD2/SMAD3-SMAD4 complex that forms in the nucleus and is required for the TGF-mediated signaling. Promotes binding of the SMAD2/SMAD4/FAST-1 complex to DNA and provides an activation function required for SMAD1 or SMAD2 to stimulate transcription. Component of the multimeric SMAD3/SMAD4/JUN/FOS complex which forms at the AP1 promoter site, required for synergistic transcriptional activity in response to TGF-beta. May act as a tumor suppressor. Positively regulates PDPK1 kinase activity by stimulating its dissociation from the 14-3-3 protein YWHAQ which acts as a negative regulator.

Aliases: (Small) Mothers Against Decapentaplegic antibody, Deleted in Pancreatic Carcinoma 4 antibody, Deleted in Pancreatic Carcinoma antibody, Deleted in pancreatic carcinoma locus 4 antibody, Deletion target in pancreatic carcinoma 4 antibody, DPC 4 antibody, DPC4 antibody, hSMAD4 antibody, JIP antibody, MAD homolog 4 antibody, MAD mothers against decapentaplegic Drosophila homolog 4 antibody, MAD mothers against decapentaplegic homolog 4 antibody, MADH 4 antibody, MADH4 antibody, Med antibody, Medea antibody, Mothers against decapentaplegic homolog 4 antibody, Mothers against decapentaplegic, Drosophila, homolog of, 4 antibody, Mothers against DPP homolog 4 antibody, MYHRS antibody, OTTHUMP00000163548 antibody, SMA- and MAD-related protein 4 antibody, SMAD 4 antibody, SMAD family member 4 antibody, SMAD mothers against DPP homolog 4 antibody, SMAD4 antibody, SMAD4_HUMAN antibody

UniProt: [Q13485](#)

Pathways: [Cell Division Cycle](#), [Chromatin Binding](#), [Autophagy](#)

Application Details

Application Notes: Recommended dilution: WB:1:500-1:5000, IHC:1:20-1:200, IP:1:200-1:2000,

Restrictions: For Research Use only

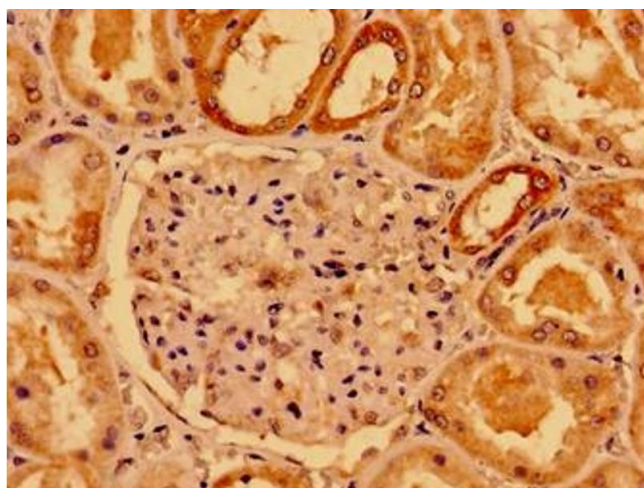
Handling

Format: Liquid

Handling

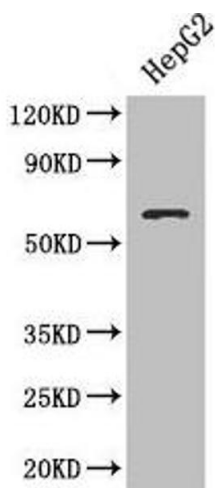
Buffer:	Preservative: 0.03 % Proclin 300
	Constituents: 50 % Glycerol, 0.01M PBS, PH 7.4
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



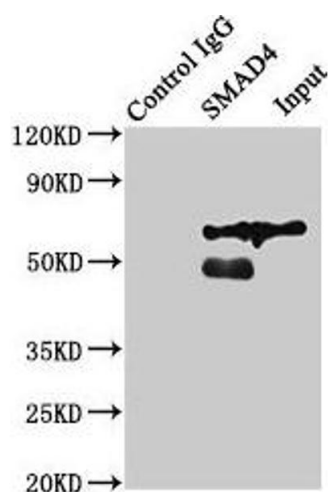
Immunohistochemistry

Image 1. Immunohistochemistry of paraffin-embedded human kidney tissue using ABIN7160238 at dilution of 1:100



Western Blotting

Image 2. Western blot All lanes: SMAD4 antibody at 3 µg/mL + HepG2 whole cell lysate Secondary Goat polyclonal to rabbit IgG at 1/10000 dilution Predicted band size: 61 kDa Observed band size: 61 kDa



Western Blotting

Image 3. Immunoprecipitating SMAD4 in Jurkat whole cell lysate Lane 1: Rabbit control IgG (1 μ g) instead of ABIN7160238 in Jurkat whole cell lysate. For western blotting, a HRP-conjugated Protein G antibody was used as the secondary antibody (1/2000) Lane 2: ABIN7160238 (8 μ g) + Jurkat whole cell lysate (500 μ g) Lane 3: Jurkat whole cell lysate (10 μ g)

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN7160238.