Datasheet for ABIN233840

anti-SMAD4 antibody (C-Term)

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Overview

Quantity:	100 µg
Target:	SMAD4
Binding Specificity:	C-Term
Reactivity:	Human, Mouse, Xenopus laevis
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), ELISA

Product Details

Purpose:	SMAD4 Antibody
Immunogen:	Immunogen: This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a region near the carboxy terminus of human SMAD4 protein. Immunogen Type: Conjugated Peptide
Isotype:	IgG
Cross-Reactivity (Details):	This affinity purified antibody is directed against human SMAD4 protein.
Characteristics:	Synonyms: rabbit anti-SMAD4 antibody, SMAD-4, SMAD 4, mothers against decapentaplegic homolog 4 antibody, MAD homolog 4, Mothers against DPP homolog 4, Deletion target in pancreatic carcinoma 4 antibody, SMAD family member 4, DPC 4, DPC4, MADH4, MADH 4
Purification:	The product was affinity purified from monospecific antiserum by immunoaffinity chromatography.

Product Details

Sterility:	Sterile filtered

Target Details

Target:	SMAD4
Alternative Name:	SMAD4 (SMAD4 Products)
Background:	Background: This antibody is designed, produced, and validated as part of a collaboration with the National Cancer Institute (NCI) and is suitable for Cancer, Immunology and Nuclear Signaling research. SMAD4 (also known as Mothers against decapentaplegic homolog 4, Mothers against DPP homolog 4, deletion target in pancreatic carcinoma 4 and hSMAD4) is a common mediator of signal transduction by TGF-b (transforming growth factor), but is also involved in cancer development and metastases as a tumor suppressor. SMAD4 promotes binding of the SMAD2/SMAD4/FAST-1 complex to DNA and provides an activation function required for SMAD1 or SMAD2 to stimulate transcription. SMAD4 may form trimers with receptor-regulated SMAD (R-SMAD) and interacts with ATF2, COPS5, DACH1, MSG1, SKI and TRIM33. In the absence of ligand SMAD4 is found in the cytoplasm, but when complexed with R-SMAD, translocates to the nucleus. Defects in SMAD4 are a cause of pancreatic carcinoma and juvenile polyposis syndrome (JPS), a syndrome in which patients are at risk for developing gastrointestinal cancers.
Gene ID:	4089, 13603414
UniProt:	Q13485
Pathways:	Cell Division Cycle, Chromatin Binding, Autophagy

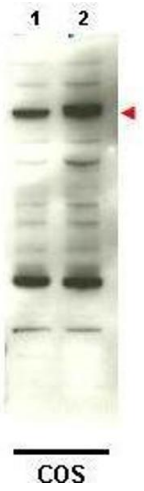
Application Details

Application Notes:	Application Note: This affinity purified antibody has been tested for use in ELISA and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 60 kDa in size corresponding to SMAD4 protein by western blotting in the appropriate cell lysate or extract. Western Blot Dilution: 1:500 - 1:2,000 ELISA Dilution: 1:15,000 - 1:60,000 Other: User Optimized
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1.2 mg/mL
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: None Preservative: 0.01 % (w/v) Sodium Azide
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:	4 °C,-20 °C
Storage Comment:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiry Date:	12 months

Images



Western Blotting

Image 1. Western blot using affinity purified anti-SMAD4 to detect over-expressed SMAD4 in transfected COS cells (lane 2). Lane 1 contains lysate from mock transfected COS cells. A doublet band is seen in the SMAD4 transfected lysate with the upper band (arrowhead) representing SMAD4 and the lower band being non-specific staining. The membrane was probed with the primary antibody at a 1:1,000 dilution. Personal Communication Kathleen Flanders, CCR-NCI, Bethesda, MD.