

Datasheet for ABIN7126667

Recombinant anti-SMAD4 antibody (AA 1-552)[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	SMAD4
Binding Specificity:	AA 1-552
Reactivity:	Human
Host:	Rabbit
Antibody Type:	Recombinant Antibody
Clonality:	Monoclonal
Conjugate:	This SMAD4 antibody is un-conjugated
Application:	Immunohistochemistry (Formalin-fixed Sections) (IHC (f))

Product Details

Immunogen:	Recombinant human full-length (aa1-552) SMAD4 protein
Isotype:	IgG
Specificity:	Signaling from the ligand-activated membrane receptor serine/threonine kinases to nuclear targets is mediated by a set of evolutionarily conserved proteins known as DPC4. Upon ligand binding, the receptors of the TGF- β family phosphorylate SMAD proteins (SMAD1 and SMAD2). These proteins then move into the nucleus, where they activate transcription. To carry out this function, the receptor activated SMAD1 and 2 require association with the product of deleted in pancreatic carcinoma, locus 4 (DPC4), also known as SMAD4. SMAD4/DPC4 is also implicated as a tumor suppressor, since it is inactivated in more than half of pancreatic carcinomas and to a lesser extent in a variety of other cancers. The lack of SMAD4 expression is present in

Product Details

approximately 80 % of cases of pancreatic adenocarcinoma, but rarely in endometrial (0 %), colorectal (0 %), ovarian (3 %), lung (0 %), breast (2 %) adenocarcinomas, and malignant melanoma (4 %). SMAD4 is an important marker for confirming a diagnosis of pancreatic adenocarcinoma.

Cross-Reactivity (Details): Human, mouse, and rat.

Purification: 1.0mg/ml of Ab purified from Bioreactor by Protein A/G.

Target Details

Target: SMAD4

Alternative Name: SMAD4 ([SMAD4 Products](#))

Background: Deleted in Pancreatic Carcinoma 4 (DPC4), JIP, MAD homolog 4 (MADH4), Mothers against decapentaplegic homolog 4 (MADH4), Mothers against DPP homolog 4, MYHRS, SMAD4, SMAD4 / DPC4 (Pancreatic Adenocarcinoma Marker / Tumor Suppressor)
Cellular localisation: Nucleus. Cytoplasm. Cytoplasmic in absence of ligand. Migrates to nucleus when complexed with R-SMAD.

Molecular Weight: 61kDa

Gene ID: 4089, 75862

UniProt: [Q13485](#)

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

Application Details

Application Notes: Known_Application: Immunohistochemistry (Formalin-fixed) (1-2 µg/mL for 30 minutes at RT), (Staining of formalin-fixed tissues requires heating tissue sections in 10 mM Tris with 1 mM EDTA, pH 9.0, for 45 min at 95 °C followed by cooling at RT for 20 minutes), Optimal dilution for a specific application should be determined.
Positive_Control: Human pancreatic ductal adenocarcinoma.

Restrictions: For Research Use only

Handling

Concentration: 1.0 mg/mL

Buffer: Prepared in 10 mM PBS, WITHOUT BSA and Azide.

Handling

Preservative:	Azide free
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Storage:	-20 °C,-80 °C
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Storage Comment:	Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous.
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Expiry Date:	24 months
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