

# Datasheet for ABIN7660002 anti-SMAD4 antibody (CF®488A)



#### Overview

Quantity:	100 μL
Target:	SMAD4
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This SMAD4 antibody is conjugated to CF®488A
Application:	Please inquire

#### **Product Details**

Purpose:	SMAD4 (Pancreatic Adenocarcinoma Marker)(SMAD4/2524), CF488A conjugate
Immunogen:	Recombinant full-length human STAT6 protein
Clone:	SMAD4-2524
Isotype:	IgG2a, kappa

Characteristics:

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- 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. SMAD4 is absent in approximately 80 % of

pancreatic adenocarcinoma, but rarely in endometrial, colorectal, ovarian, lung, breast adenocarcinomas, and malignant melanom. SMAD4 is an important marker for confirming a diagnosis of pancreatic adenocarcinoma. Patients with pancreatic adenocarcinomas with SMAD4 protein expression had significantly longer survival than SMAD4 negative patients. Primary antibodies are available purified, or with a selection of fluorescent CF® Dyes and other labels. CF® Dyes offer exceptional brightness and photostability. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

### **Target Details**

Target:	SMAD4
Alternative Name:	SMAD4
Background:	Synonyms: Deleted in Pancreatic Carcinoma 4 (DPC4), JIP, MAD homolog 4 (MADH4), Mothers against decapentaplegic homolog 4 (MADH4), Mothers against DPP homolog 4, MYHRS, SMAD4  Gene Symbol: STAT6
Molecular Weight:	61 kDa
Gene ID:	4089
UniProt:	Q13485
Pathways:	Cell Division Cycle, Chromatin Binding, Autophagy

#### **Application Details**

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Application Notes:	For coating for ELISA, order Ab without BSA. Higher concentration may be required for direct
	detection using primary antibody conjugates than for indirect detection with secondary
	antibody. Optimal dilution and staining procedure for a specific application should be
	determined by user. Recommended starting concentrations for titration are 1-2 $\mu$ g/mL for most
	applications, or 1 μg/million cells/100 μLfor flow cytometry
Comment:	Positive Control: Jurkat or A431 cells. Pancreatic Carcinoma.
Restrictions:	For Research Use only

## Handling

Format:	Liquid
Concentration:	0.1 mg/mL
Buffer:	PBS, 0.1 % BSA, 0.05 % 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.
Handling Advice:	Protect from light
Storage:	4 °C
Storage Comment:	Stable at room temperature or 37°C for 7 days.  Protect from light  Store at 2 to 8°C. Protect fluorescent conjugates from light
Expiry Date:	24 months