

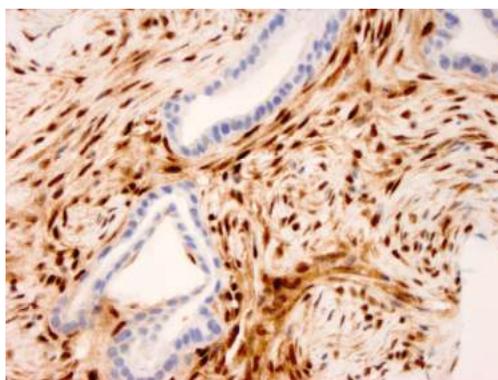
DPC4 (SMAD4) (Clone B-8) Mouse Monoclonal Antibody

Specificity:	Human. Others-not tested
Immunogen:	Amino acid 1-552 representing full length Smad4 of human origin.
Ig Class:	IgG1
Storage:	Store vial at 4°C. When stored at 2-8°C, this antibody is stable for 24 months

Staining procedures: Use formalin-fixed and paraffin-embedded sections. *Retrieval conditions:* For formalin-fixed tissues, optimal results are obtained by pretreating tissues with heat-induced epitope retrieval using high pH target retrieval solution. *Detection methods:* Polymer anti-mouse/rabbit Ig detection system. *Working dilution:* 1:50-100; *Positive Control:* Pancreatic adenocarcinoma. *Cellular Localization:* Nuclear. *Intended Use:* In vitro diagnosis (IVD).

Description: 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 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. Patients with pancreatic adenocarcinomas with SMAD4 protein expression had significantly longer survival than SMAD4 negative patients.

Supplied As: Purified antibody with 0.2% BSA and 15mM sodium azide.



Formalin-fixed human pancreatic adenocarcinoma stained with anti-DPC4 antibody using peroxidase-conjugate and DAB chromogen. Note the negative staining of carcinoma glands whereas stromal cells are positive

Cat. #Z2240 (1.0 ml)