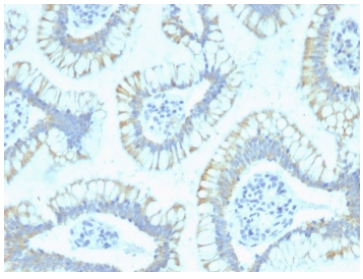
SMAD4 Antibody [clone SPM448] (V8318)

Catalog No.	Formulation	Size
V8318-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8318-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8318SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	SPM448
Purity	Protein G affinity chromatography
UniProt	Q13485
Localization	Cytoplasmic & Nuclear
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This SMAD4 antibody is available for research use only.



IHC staining of FFPE human colon carcinoma with SMAD4 antibody (clone SPM448). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

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- 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.

Application Notes

Optimal dilution of the SMAD4 antibody should be determined by the researcher.

Immunogen

Recombinant full-length human protein was used as the immunogen for the SMAD4 antibody.

Storage

Store the SMAD4 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).