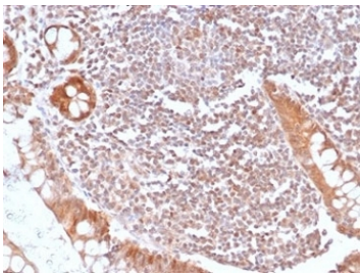
Recombinant SMAD4 Antibody [clone SMAD/6309R] (V8901)

Catalog No.	Formulation	Size
V8901-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V8901-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V8901SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

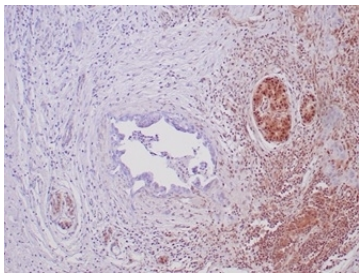
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	SMAD/6309R
Purity	Protein A/G affinity
UniProt	Q13485
Localization	Nucleus, Cytoplasm
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This recombinant SMAD4 antibody is available for research use only.



IHC staining of FFPE human small intestine with recombinant SMAD4 antibody (clone SMAD4/6309R). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



Immunohistochemical staining with recombinant SMAD4 antibody (clone SMAD4/6309R) showing loss of SMAD4 expression in pancreatic ductal adenocarcinoma and positive/retained SMAD4 staining in adjacent benign ductal epithelium and background stroma.

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. 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%). SMAD4is an important marker for confirming a diagnosis of pancreatic adenocarcinoma.

Application Notes

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

Immunogen

Recombinant human full-length SMAD4 protein (amino acids 1-552) was used as the immunogen for the recombinant SMAD4 antibody.

Storage

Aliquot the recombinant SMAD4 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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