Recombinant SMAD4 / DPC4 (Pancreatic Adenocarcinoma Marker / Tumor Suppressor) Antibody

Rabbit Monoclonal Antibody [Clone SMAD/6309R]

Catalog No	Format	Size
4089-RBM19-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
4089-RBM19-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
4089-RBM19-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

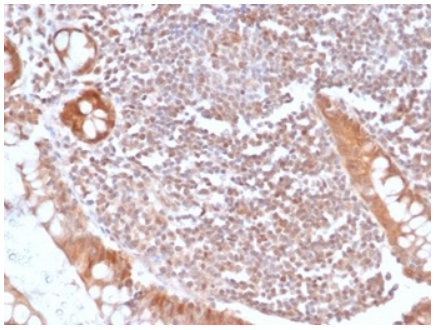
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

Product Details

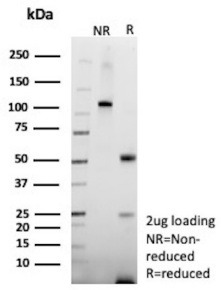
Clone	SMAD/6309R
Gene Name	SMAD4
Immunogen	Recombinant human full-length (aa1-552) SMAD4 protein
Host	Rabbit
Clonality	Monoclonal
Isotype / Light Chain	IgG / Kappa
Mol. Weight of Antigen	61kDa
Cellular Localization	Cytoplasm, Nucleus
Species Reactivity	Human, Mouse, Rat
Positive Control	Human pancreatic ductal adenocarcinoma. HeLa

**Optimal dilution for a specific application should be determined.*

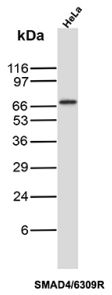
Product Images for Recombinant SMAD4 / DPC4 (Pancreatic Adenocarcinoma Marker / Tumor Suppressor) Antibody



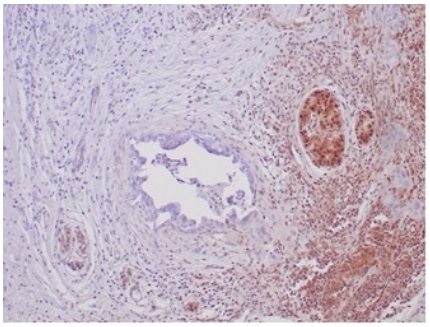
Formalin-fixed, paraffin-embedded human small intestine stained with SMAD4 / DPC4 Recombinant Rabbit Monoclonal Antibody (SMAD4/6309R). HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.



SDS-PAGE Analysis of Purified Mothers against decapentaplegic homolog 4 Recombinant Rabbit Monoclonal Antibody (SMAD/6309R). Confirmation of Purity and Integrity of Antibody.



Western Blot Analysis of HeLa cell lysate using SMAD4 / DPC4 Recombinant Rabbit Monoclonal Antibody (SMAD4/7902).



Immunohistochemical stain using SMAD4/6309R showing loss of SMAD4 expression in pancreatic ductal adenocarcinoma. Note adjacent benign ductal epithelium and background stroma as internal control showing positive / retained SMAD4 staining.

Specificity & Comments

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.

Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Research Areas

Cardiovascular, Colon Cancer, Developmental Biology, Infectious Disease, Neuroinflammation, Nuclear Marker, Signal Transduction, Transcription Factors

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.