Catalog # 4089-RBM25
Product Datasheet

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

Rabbit Monoclonal Antibody [Clone SMAD4/7905R]

Catalog No	Format	Size
4089-RBM25-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
4089-RBM25-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
4089-RBM25-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

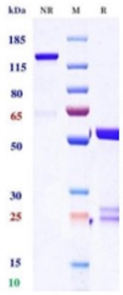
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

Product Details

Clone	SMAD4/7905R
Gene Name	SMAD4
Immunogen	Recombinant fragment (around aa400-552) of human SMAD4 protein (exact sequence is proprietary)
Host	Rabbit
Clonality	Monoclonal
Isotype / Light Chain	IgG / Kappa
Mol. Weight of Antigen	61kDa
Cellular Localization	Nucleus. Cytoplasm. Cytoplasmic in absence of ligand. Migrates to nucleus when complexed with R-SMAD.
Species Reactivity	Human
Positive Control	Human pancreatic ductal adenocarcinoma.

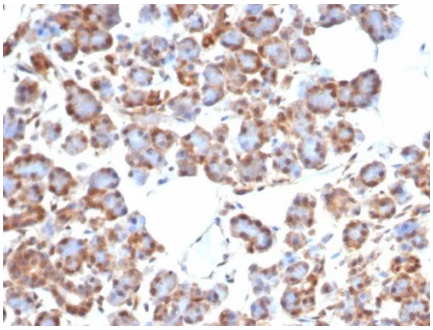
**Optimal dilution for a specific application should be determined.*

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



SDS-PAGE under non-reducing (NR) and reducing (R) conditions. The gel was stained with Coomassie Blue. The purity of the protein is 95%.

SDS-PAGE Analysis of Purified SMAD4 Recombinant Rabbit Monoclonal Antibody (SMAD4/7905R). Confirmation of Purity and Integrity of Antibody.



Formalin-fixed, paraffin-embedded human salivary gland stained with SMAD4 / DPC4 Recombinant Rabbit Monoclonal Antibody (SMAD4/7905R). HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.

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-Î ? 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.