

## 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

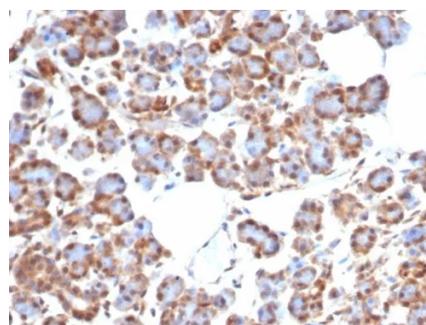
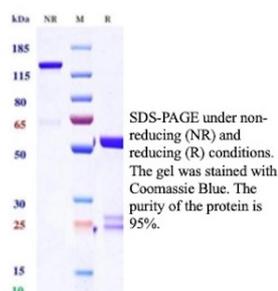
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

### Product Details

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

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### 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.

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### 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.

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### 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.

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### Research Areas

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

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