

SMAD4 Antibody [clone rSMAD4/6310] (V4035)

Catalog No.	Formulation	Size
V4035-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4035-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4035SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Recombinant **MOUSE MONOCLONAL**

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Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rSMAD4/6310
Purity	Protein A/G affinity
UniProt	Q13485
Localization	Cytoplasm, nucleus
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This recombinant SMAD4 antibody is available for research use only.



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%). SMAD4 is 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

Full-length human 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 -20°C or colder. Avoid repeated freeze-thaw cycles.