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SMAD8/SMAD9 Rabbit pAb

Catalog # AP97354

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	O15198
Other Accession	O15198
Reactivity	Rat, Human, Mouse
Predicted	Zebrafish
Host	Rabbit
Clonality	Polyclonal
Calculated MW	52493
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SMAD8
Epitope Specificity	351-450/467
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the dwarfin/SMAD family.Contains 1 MH1 (MAD homology 1) domain.Contains 1 MH2 (MAD homology 2) domain.
SUBUNIT	Interaction with the co-SMAD SMAD4. Interacts with PEBP2-alpha subunit.
Post-translational modifications	Phosphorylated on serine by BMP (bone morphogenetic proteins) type 1 receptor kinase.
DISEASE	Defects in SMAD9 may be a cause of primary pulmonary hypertension (PPH1) [MIM:178600]. A rare disorder characterized by plexiform lesions of proliferating endothelial cells in pulmonary arterioles. The lesions lead to elevated pulmonary arterial pression, right ventricular failure, and death. The disease can occur from infancy throughout life and it has a mean age at onset of 36 years. Penetrance is reduced. Although familial PPH1 is rare, cases secondary to known etiologies are more common and include those associated with the appetite-suppressant drugs.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	SMAD9 is a member of the MAD-related family of molecules. MAD-related proteins are a recently identified family of intracellular proteins that are thought to be essential components in the signaling pathways of the serine/threonine kinase receptors of the transforming growth factor beta superfamily.

Additional Information

Gene ID	4093
Other Names	SMAD9_HUMAN; SMAD9; MAD homolog 9; Mothers against DPP homolog 9; Madh6; SMAD family member 9 (SMAD 9 | Smad9); MADH9; SMAD8; SMAD9_MOUSE; Madh8; SMAD9_RAT; SMAD family member 9; MAD, mothers

	against decapentaplegic homolog 9 (Drosophila); SMAD, mothers against DPP homolog 9 (Drosophila)
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	SMAD9 (HGNC:6774)
Function	Transcriptional modulator activated by BMP (bone morphogenetic proteins) type 1 receptor kinase. SMAD9 is a receptor- regulated SMAD (R-SMAD).
Cellular Location	Cytoplasm. Nucleus. Note=In the cytoplasm in the absence of ligand. Migration to the nucleus when complexed with SMAD4 (By similarity).
Tissue Location	Expressed in heart, brain, placenta, lung, skeletal muscle, prostate, testis, ovary and small intestine. Also expressed in fetal brain, lung and kidney

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.