Datasheet for ABIN6256613

anti-PDGFRB antibody (pTyr1021)

2 Images

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Overview

Quantity:	100 µL
Target:	PDGFRB
Binding Specificity:	pTyr1021
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PDGFRB antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC)

Product Details

Immunogen:	A synthesized peptide derived from human PDGF Receptor beta around the phosphorylation site of Tyr1021.
Isotype:	IgG
Specificity:	Phospho-PDGF Receptor beta (Tyr1021) Antibody detects endogenous levels of PDGF Receptor beta only when phosphorylated at Tyrosine 1021.
Predicted Reactivity:	Pig,Horse,Sheep,Rabbit,Dog,Chicken,Xenopus
Purification:	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.

Target Details

Target:	PDGFRB

Target Details

Alternative Name:	PDGFRB (PDGFRB Products)
Background:	Description: Tyrosine-protein kinase that acts as cell-surface receptor for homodimeric PDGFB and PDGFD and for heterodimers formed by PDGFA and PDGFB, and plays an essential role in the regulation of embryonic development, cell proliferation, survival, differentiation, chemotaxis and migration. Plays an essential role in blood vessel development by promoting proliferation, migration and recruitment of pericytes and smooth muscle cells to endothelial cells. Plays a role in the migration of vascular smooth muscle cells and the formation of neointima at vascular injury sites. Required for normal development of the cardiovascular system. Required for normal recruitment of pericytes (mesangial cells) in the kidney glomerulus, and for normal formation of a branched network of capillaries in kidney glomeruli. Promotes rearrangement of the actin cytoskeleton and the formation of membrane ruffles. Binding of its cognate ligands - homodimeric PDGFB, heterodimers formed by PDGFA and PDGFB or homodimeric PDGFD - leads to the activation of several signaling cascades, the response depends on the nature of the bound ligand and is modulated by the formation of heterodimers between PDGFRA and PDGFRB. Phosphorylates PLCG1, PIK3R1, PTPN11, RASA1/GAP, CBL, SHC1 and NCK1. Activation of PLCG1 leads to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate, mobilization of cytosolic Ca2+ and the activation of protein kinase C. Phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase, leads to the activation of the AKT1 signaling pathway. Phosphorylation of SHC1, or of the C-terminus of PTPN11, creates a binding site for GRB2, resulting in the activation of HRAS, RAF1 and down-stream MAP kinases, including MAPK1/ERK2 and/or MAPK3/ERK1. Promotes phosphorylation and activation of SRC family kinases. Promotes phosphorylation of PDCD6IP/ALIX and STAM. Receptor signaling is down-regulated by protein phosphatases that dephosphorylate the receptor and its down-stream effectors, and by rapid internalization of the activated receptor. Gene: PDGFRB
Molecular Weight:	130 kDa
Gene ID:	5159
UniProt:	P09619
Pathways:	Fc-epsilon Receptor Signaling Pathway, EGFR Signaling Pathway, Neurotrophin Signaling Pathway, Inositol Metabolic Process, Glycosaminoglycan Metabolic Process, Smooth Muscle Cell Migration, Platelet-derived growth Factor Receptor Signaling

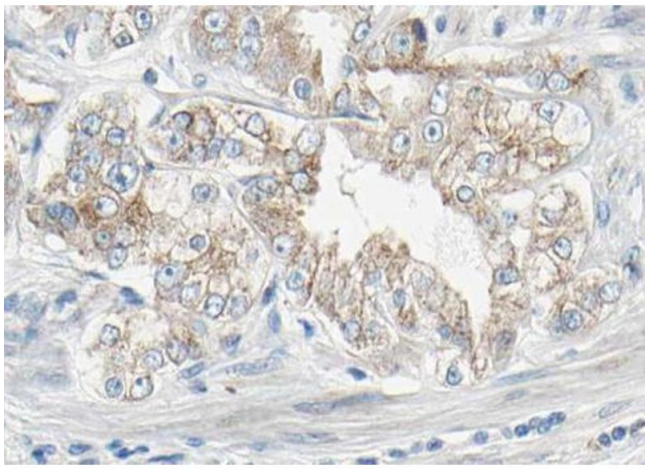
Application Details

Application Notes:	WB 1:500-1:2000, IHC 1:50-1:200, ELISA(peptide) 1:20000-1:40000
Restrictions:	For Research Use only

Handling

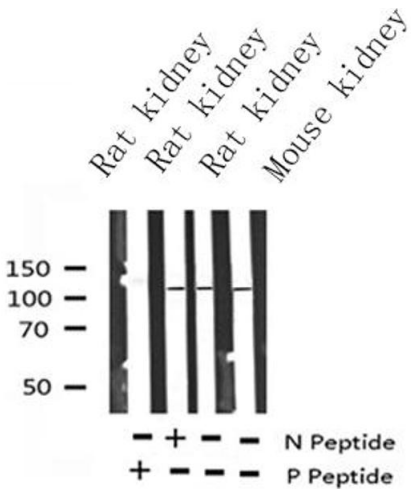
Format:	Liquid
Concentration:	1 mg/mL
Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20 °C. Stable for 12 months from date of receipt.
Expiry Date:	12 months

Images



Immunohistochemistry

Image 1. AF3132 at 1/100 staining human Prostate tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



Western Blotting

Image 2. Western blot analysis of Phospho-PDGFR beta (Tyr1021) Antibody expression in Rat kidney and mouse kidney tissues lysates.