# PDGF Receptor beta Rabbit mAb [c68P]

Cat NO. :A73292

### Information:

Applications	Reactivity:	UniProt ID:	MW(kDa)	Host	Isotype	Size
WB IHC ICC/IF IP	Human,Mouse,R	P09619	170kDa	Rabbit	lgG	50ul,100ul,200ul
	at					

### Applications detail:

Application	Dilution			
₩В	1:1000-2000			
ІНС	1:100			
ICC/IF	1:100			
The optimal dilutions should be determined by the end user				

## Conjugate:

UnConjugate

Form:

Liquid

sensitivity

Endogenous

**Purification**:

Affinity-chromatography

#### Specificity:

Antibody is produced by immunizing animals with A synthesized peptide derived from human PDGF Receptor beta

#### Storage buffer and conditions:

Antibody store in 10 mM PBS, 0.5mg/ml BSA, 50% glycerol (buffer).

Shipped at 4°C. Store at-20°C or -80°C.

Products are valid for one natural year of receipt. Avoid repeated freeze / thaw cycles.

**Tissue specificity:** 

#### Subcellular location:

Cell membrane, Single-pass type I membrane protein. Cytoplasmic vesicle. Lysosome lumen.

Introduction: WB: Western Blot IP: Immunoprecipitation IHC: Immunohistochemistry ChIP: Chromatin Immunoprecipitation ICC/IF: Immunocytochemistry/ Immunofluorescence F: Flow Cytometry

Cross Reactivity: H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus MI: mink C: chicken Dm D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Hr: horse

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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 Ca(2+) 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..

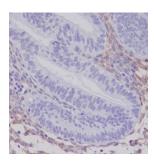
# Validation Data:

## PDGF Receptor beta Rabbit mAb [c68P] Images



Western blot (SDS PAGE) analysis of extracts from SH-SY5Y cell lysate. Using PDGF Receptor beta Rabbit mAb [c68P] at dilution of 1:1000 incubated at 4 $^{\circ}$ C over night.

View more information on http://naturebios.com



Immunohistochemical analysis of paraffin-embedded human uterus, .Using PDGF Receptor beta Rabbit mAb [c68P] at dilution of 1:100 incubated at 4 °C over night.Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunofluorescent analysis of 3T3 cells, Using PDGF Receptor beta Rabbit mAb [c68P] at dilution of 1:100 incubated at 4  $^{\circ}\!\!C$  over night.

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 1% w/v Milk, 1X TBST at 4°C overnight.