

Datasheet for ABIN7163630
anti-PDGFRB antibody (AA 901-1106)



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2 Images

Overview

Quantity:	100 µg
Target:	PDGFRB
Binding Specificity:	AA 901-1106
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PDGFRB antibody is un-conjugated
Application:	ELISA, Immunohistochemistry (IHC), Immunofluorescence (IF)

Product Details

Immunogen:	Recombinant Human Platelet-derived growth factor receptor beta protein (901-1106AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified

Target Details

Target:	PDGFRB
Alternative Name:	PDGFRB (PDGFRB Products)
Background:	Background: 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.

Aliases: Beta platelet derived growth factor receptor antibody, Beta-type platelet-derived growth factor receptor antibody, CD 140B antibody, CD140 antigen-like family member B antibody, CD140b antibody, CD140b antigen antibody, IBGC4 antibody, IMF1 antibody, JTK12 antibody, OTTHUMP00000160528 antibody, PDGF R beta antibody, PDGF Receptor beta antibody, PDGF-R-beta antibody, PDGFR 1 antibody, PDGFR antibody, PDGFR beta antibody, PDGFR1 antibody, PDGFRB antibody, PGFRB_HUMAN antibody, Platelet derived growth factor receptor 1 antibody, Platelet derived growth factor receptor beta antibody, Platelet derived growth factor receptor beta polypeptide antibody

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](#)

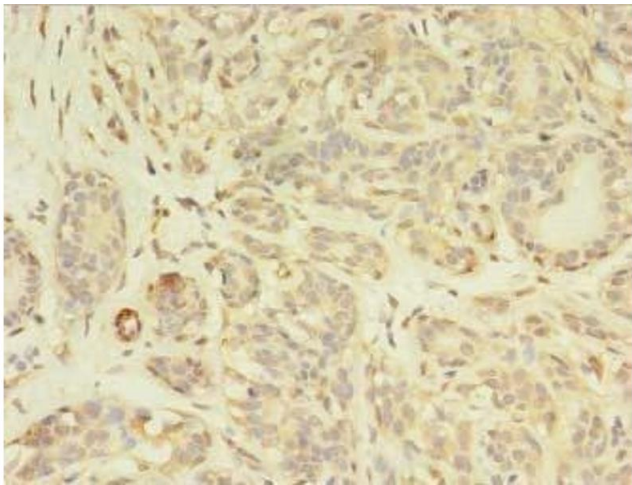
Application Details

Application Notes:	Recommended dilution: IHC:1:20-1:200, IF:1:50-1:200,
Restrictions:	For Research Use only

Handling

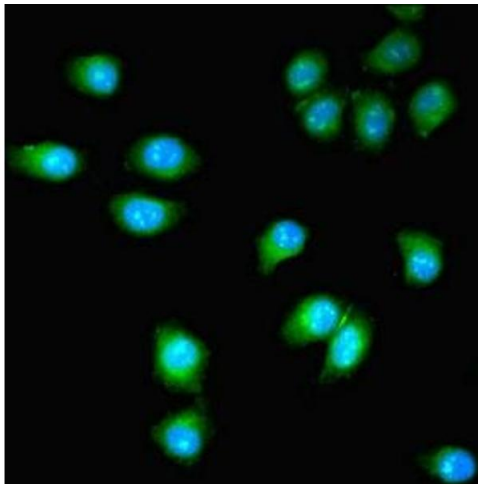
Format:	Liquid
Buffer:	Preservative: 0.03 % Proclin 300 Constituents: 50 % Glycerol, 0.01M PBS, PH 7.4
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



Immunohistochemistry

Image 1. Immunohistochemistry of paraffin-embedded human breast cancer using ABIN7163630 at dilution of 1:100



Immunofluorescence

Image 2. Immunofluorescent analysis of A549 cells using ABIN7163630 at dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)