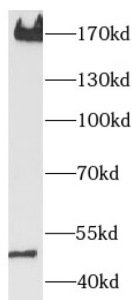
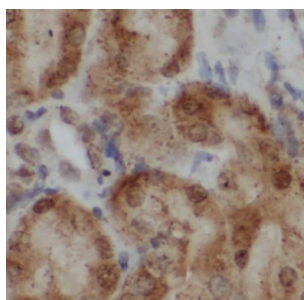


Platelet Derived Growth Factor Receptor Beta (PDGFRB) Antibody

Catalogue No.: abx149044



WB analysis of mouse lung tissue, using PDGFRB antibody (1/1000 dilution).



IHC-P analysis of human kidney tissue, using PDGFRB antibody (1/100 dilution).

Platelet Derived Growth Factor Receptor Beta (PDGFRB) Antibody is a Rabbit Polyclonal antibody for the detection of PDGFRB.

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.

Target: Platelet Derived Growth Factor Receptor Beta (PDGFRB)

Clonality: Polyclonal

Reactivity: Human, Mouse, Rat

Datasheet

Version: 3.0.0
Revision date: 26 Jun 2025



Tested Applications:	ELISA, WB, IHC
Host:	Rabbit
Recommended dilutions:	WB: 1/200 - 1/2000, IHC: 1/50 - 1/200. Optimal dilutions/concentrations should be determined by the end user.
Conjugation:	Unconjugated
Immunogen:	platelet-derived growth factor receptor, beta polypeptide
Isotype:	IgG
Form:	Liquid
Purity:	≥ 95% (SDS-PAGE)
Purification:	Purified by immunogen affinity chromatography.
Storage:	Aliquot and store at -20°C. Avoid repeated freeze/thaw cycles.
Validity:	12 months.
UniProt Primary AC:	P09619 (UniProt , ExPASy)
Gene Symbol:	PDGFRB
GeneID:	5159
OMIM:	131440
HGNC:	8804
KEGG:	hsa:5159
Ensembl:	ENSG00000113721
String:	9606.ENSP00000261799
Molecular Weight:	Observed MW: 50 kDa, 160-180 kDa
Buffer:	PBS, pH 7.3, with 0.02% sodium azide and 50% glycerol.
Concentration:	2 mg/ml

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Note:

THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC, THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION.

For Reference Only