

## Summary

Production Name	PDGFR- $\beta$ (phospho Tyr1021) Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	ELISA,IHC,WB
Reactivity	Human, Mouse, Rat

## Performance

Conjugation	Unconjugated
Modification	Phospho Antibody
lsotype	lgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

## Immunogen

Gene Name	PDGFRB
Alternative Names	PDGFRB; PDGFR; PDGFR1; Platelet-derived growth factor receptor beta; PDGF-R-beta;
	PDGFR-beta; Beta platelet-derived growth factor receptor; Beta-type platelet-derived
	growth factor receptor; CD140 antigen-like family member B; Platelet-deri
Gene ID	5159.0
SwissProt ID	P09619.The antiserum was produced against synthesized peptide derived from human
	PDGFR beta around the phosphorylation site of Tyr1021. AA range:991-1040

# Application

Dilution Ratio	WB 1:500-2000 IHC 1:100 - 1:300. ELISA: 1:5000.
Molecular Weight	135-180kD



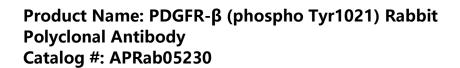
# Background

This gene encodes a cell surface tyrosine kinase receptor for members of the platelet-derived growth factor family. These growth factors are mitogens for cells of mesenchymal origin. The identity of the growth factor bound to a receptor monomer determines whether the functional receptor is a homodimer or a heterodimer, composed of both plateletderived growth factor receptor alpha and beta polypeptides. This gene is flanked on chromosome 5 by the genes for granulocyte-macrophage colony-stimulating factor and macrophage-colony stimulating factor receptor; all three genes may be implicated in the 5-g syndrome. A translocation between chromosomes 5 and 12, that fuses this gene to that of the translocation, ETV6, leukemia gene, results in chronic myeloproliferative disorder with eosinophilia. [provided by RefSeq, Jul 2008], catalytic activity: ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate., disease: A chromosomal aberration involving PDGFRB is a cause in many instances of chronic myeloproliferative disorder with eosinophilia (MPE) [MIM:131440]. Translocation t(5;12) with ETV6 on chromosome 12 creating an PDGFRB-ETV6 fusion protein., disease:A chromosomal aberration involving PDGFRB is found in a form of chronic myelomonocytic leukemia (CMML). Translocation t(5;12)(q33;p13) with EVT6/TEL. It is characterized by abnormal clonal myeloid proliferation and by progression to acute myelogenous leukemia (AML)., disease: A chromosomal aberration involving PDGFRB may be a cause of acute myelogenous leukemia. Translocation t(5;14)(q33;q32) with TRIP11. The fusion protein may be involved in clonal evolution of leukemia and eosinophilia., disease: A chromosomal aberration involving PDGFRB may be a cause of juvenile myelomonocytic leukemia. Translocation t(5;17)(q33;p11.2) with SPECC1., disease: A chromosomal aberration involving PDGFRB may be the cause of a myeloproliferative disorder (MBD) associated with eosinophilia. Translocation t(1;5)(q23;q33) that forms a PDE4DIP-PDGFRB fusion protein., function: Receptor that binds specifically to PDGFB and PDGFD and has a tyrosine-protein kinase activity. Phosphorylates Tyr residues at the C-terminus of PTPN11 creating a binding site for the SH2 domain of GRB2., similarity: Belongs to the protein kinase superfamily. Tyr protein kinase family., similarity: Belongs to the protein kinase superfamily. Tyr protein kinase family. CSF-1/PDGF receptor subfamily., similarity: Contains 1 protein kinase domain.,similarity:Contains 5 Ig-like C2-type (immunoglobulin-like) domains.,subunit:Homodimer, and heterodimer with PDGFRA. Interacts with APS. The autophosphorylated form interacts directly with SHB and with PIK3C2B, maybe indirectly.,

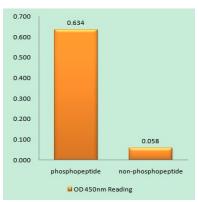
#### **Research Area**

MAPK\_ERK\_Growth;MAPK\_G\_Protein;Calcium;Cytokine-cytokine receptor interaction;Focal adhesion;Gap junction;Regulates Actin and Cytoskeleton;Pathways in cancer;Colorectal cancer;Glioma;Prostate cancer;Melanoma;

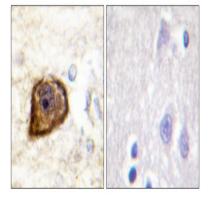
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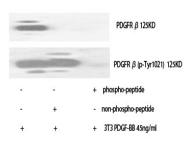




Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using PDGFR beta (Phospho-Tyr1021) Antibody



Immunohistochemistry analysis of paraffin-embedded human brain, using PDGFR beta (Phospho-Tyr1021) Antibody. The picture on the right is blocked with the phospho peptide.



Western Blot analysis of various cells using Phospho-PDGFR-β (Y1021) Polyclonal Antibody

#### Note

For research use only.