

## Summary

<b>Production Name</b>	PDGFR- $\beta$ Rabbit Polyclonal Antibody
<b>Description</b>	Rabbit Polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	IF,IHC,WB,ELISA
<b>Reactivity</b>	Human,Mouse,Rat

## Performance

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

## Immunogen

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

## Application

<b>Dilution Ratio</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:5000. Not yet tested in other applications.
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**Molecular Weight**            135-180kD

## Background

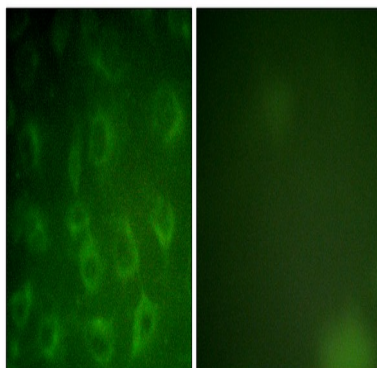
This gene encodes a cell surface tyrosine kinase receptor for members of the platelet-derived growth factor family. These growth factors are mitogens for cells of mesenchymal origin. The identity of the growth factor bound to a receptor monomer determines whether the functional receptor is a homodimer or a heterodimer, composed of both platelet-derived 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-q 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

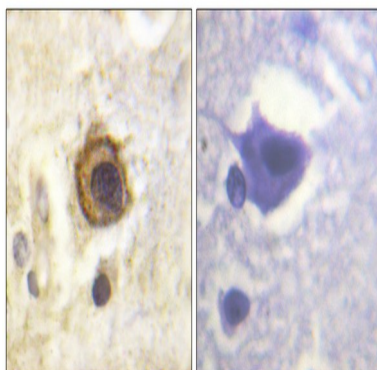
MAPK\_ERK\_Growth;MAPK\_G\_Protein;Calcium;Cytokine-cytokine receptor interaction;Focal adhesion;Gap junction;Regulates Actin and Cytoskeleton;Pathways in cancer;Colorectal cancer;Glioma;Prostate cancer;Melanoma;

## Image Data

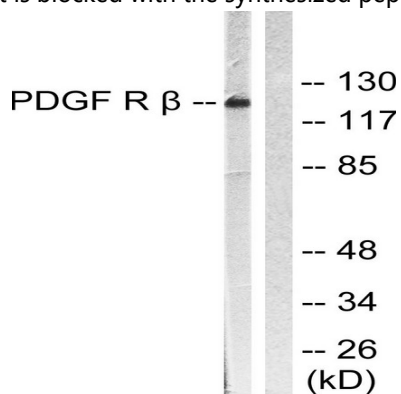
**Product Name: PDGFR- $\beta$  Rabbit Polyclonal Antibody**  
**Catalog #: APRab15908**



Immunofluorescence analysis of COS7 cells, using PDGFR beta Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using PDGFR beta Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from LOVO cells, treated with H<sub>2</sub>O<sub>2</sub> 100 $\mu$ M 30', using PDGFR beta Antibody. The lane on the right is blocked with the synthesized peptide.

## Note

For research use only.