

## 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,
<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 PDGF Receptor beta. AA range:718-767

## Application

<b>Dilution Ratio</b>	WB 1:500 - 1:2000 IHC-p: 1:100-300 ELISA: 1:20000. IF 1:100-300 Not yet tested in other applications.
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**Molecular Weight**                      135-180kD

## Background

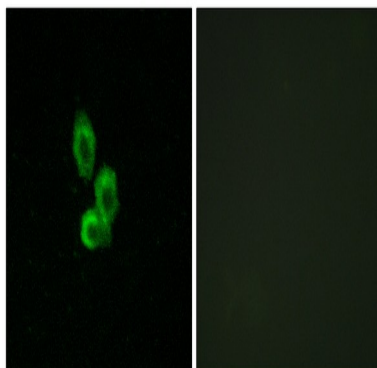
This gene encodes a cell surface tyrosine kinase receptor for members of the platelet-derived growth factor family. These growth factors are mitogens for cells of mesenchymal origin. The identity of the growth factor bound to a receptor monomer determines whether the functional receptor is a homodimer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

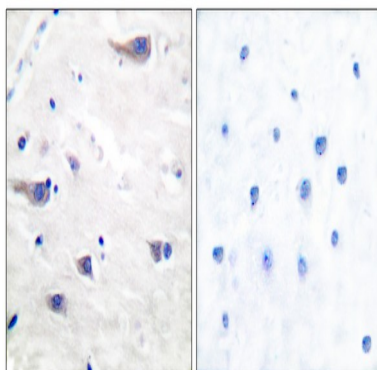
MAPK\_ERK\_Growth;MAPK\_G\_Protein;Calcium;Cytokine-cytokine receptor interaction;Focal adhesion;Gap junction;Regulates Actin and Cytoskeleton;Pathways in cancer;Colorectal cancer;Glioma;Prostate cancer;Melanoma;

## Image Data

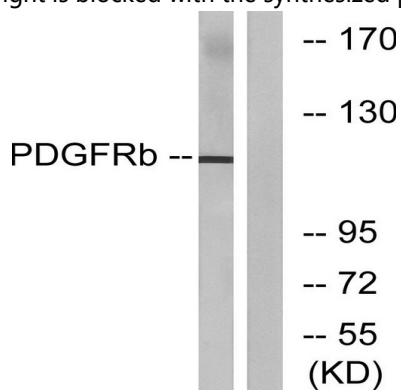
**Product Name: PDGFR- $\beta$  Rabbit Polyclonal Antibody**  
**Catalog #: APRab15909**



Immunofluorescence analysis of HepG2 cells, using PDGF Receptor beta Antibody. The picture on the right is blocked with the synthesized peptide.

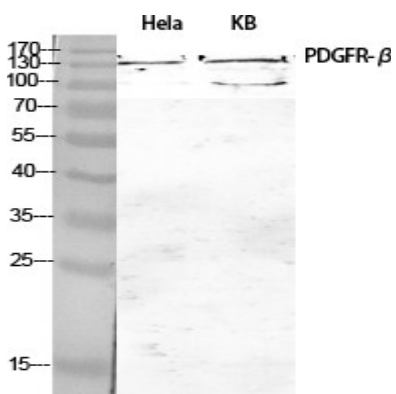


Immunohistochemistry analysis of paraffin-embedded human brain tissue, using PDGF Receptor beta Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from LOVO cells, using PDGF Receptor beta Antibody. The lane on the right is blocked with the synthesized peptide.

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Western Blot analysis of various cells using PDGFR- $\beta$  Polyclonal Antibody diluted at 1 : 1000

**Note**

For research use only.