

## PDGFR-β Polyclonal Antibody

Catalog No: YT3639

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

Target: PDGFR-β

**Fields:** >>EGFR tyrosine kinase inhibitor resistance;>>MAPK signaling pathway;>>Ras

signaling pathway;>>Rap1 signaling pathway;>>Calcium signaling pathway;>>Phospholipase D signaling pathway;>>Pl3K-Akt signaling pathway;>>Focal adhesion;>>Gap junction;>>JAK-STAT signaling pathway;>>Regulation of actin cytoskeleton;>>Human papillomavirus

infection;>>Pathways in cancer;>>MicroRNAs in cancer;>>Glioma;>>Prostate cancer:>>Melanoma:>>Central carbon metabolism in cancer:>>Choline

metabolism in cancer

Gene Name: PDGFRB

**Protein Name:** Platelet-derived growth factor receptor beta

P05622

Human Gene Id: 5159

**Human Swiss Prot** P09619

No:

Mouse Gene Id: 18596

**Mouse Swiss Prot** 

No:

Rat Gene Id: 24629

Rat Swiss Prot No: Q05030

**Immunogen:** The antiserum was produced against synthesized peptide derived from human

PDGF Receptor beta. AA range:718-767

Specificity: PDGFR-β Polyclonal Antibody detects endogenous levels of PDGFR-β protein.

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.



**Sormdation:** Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500 - 1:2000. IHC: 1:100-300 ELISA: 1:20000. IF 1:100-300 Not yet

tested in other applications.

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 135-180kD

Cell Pathway: 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; M

**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

syndrome. A translocation between chromosomes 5 and 12, that fuses this gene

stimulating factor receptor; all three genes may be implicated in the 5-q

to that of the translocation, ETV6, leukemia gene, results in chronic myeloproliferative disorder with eosinophilia. [provided by RefSeq. Jul 2008],

**Function:** 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

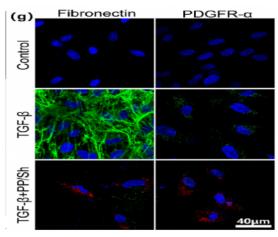
Subcellular Location:

Cell membrane; Single-pass type I membrane protein. Cytoplasmic vesicle. Lysosome lumen. After ligand binding, the autophosphorylated receptor is

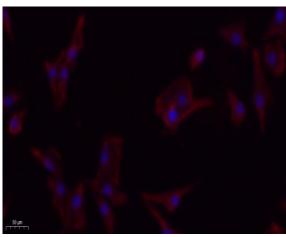
ubiquitinated and internalized, leading to its degradation.

**Expression:** Brain, Spleen,

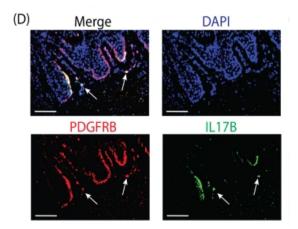
## **Products Images**



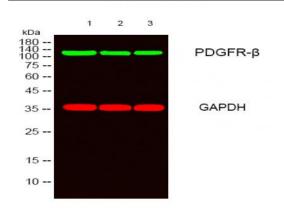
Non-viral gene therapy using RNA interference with PDGFR- $\alpha$  mediated epithelial-mesenchymal transformation for proliferative vitreoretinopathy Materials Today Bio Quankui Lin WB,IF Rabbit,Human ocular tissue ARPE-19 cell



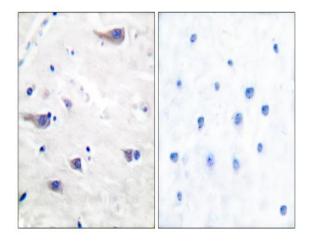
Immunofluorescence analysis of A549. 1,primary Antibody(red) was diluted at 1:200(4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000(room temperature, 50min).3, Picture B: DAPI(blue) 10min.



Gao, Y., Yao, X., Zhai, Y. et al. Single cell transcriptional zonation of human psoriasis skin identifies an alternative immunoregulatory axis conducted by skin resident cells. Cell Death Dis 12, 450 (2021).



Western blot analysis of lysates from 1) Hela, 2) K562, 3) KB cells, ? Green? primary antibody was diluted at 1:1000, 4° over night, secondary antibody(cat:RS23920)was diluted at 1:10000, 37° 1hour. ? Red? GAPDH Monoclonal Antibody(2B8) (cat:YM3029) antibody was diluted at 1:5000 as loading control, 4° over night, secondary antibody(cat:RS23710)was diluted at 1:10000, 37° 1hour.



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