

## PDGFR-α (phospho Tyr754) Polyclonal Antibody

Catalog No: YP0993

**Reactivity:** Human; Mouse; Rat

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

Target: PDGF Receptor a

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

signaling pathway;>>Rap1 signaling pathway;>>Calcium signaling

pathway;>>Phospholipase D signaling pathway;>>Endocytosis;>>PI3K-Akt signaling pathway;>>Focal adhesion;>>Gap junction;>>JAK-STAT signaling pathway;>>Regulation of actin cytoskeleton;>>Human cytomegalovirus

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

metabolism in cancer

Gene Name: PDGFRA

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

P16234

P26618

Human Gene Id: 5156

**Human Swiss Prot** 

No:

Mouse Gene Id: 18595

**Mouse Swiss Prot** 

No:

Rat Gene ld: 25267

Rat Swiss Prot No: P20786

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

PDGFR alpha around the phosphorylation site of Tyr754. AA range:721-770

**Specificity:** Phospho-PDGFR-α (Y754) Polyclonal Antibody detects endogenous levels of

PDGFR-a protein only when phosphorylated at Y754.



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

Source: Polyclonal, Rabbit, IgG

**Dilution :** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200

**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: 122kD

**Cell Pathway:** MAPK\_ERK\_Growth;MAPK\_G\_Protein;Calcium;Cytokine-cytokine receptor

interaction; Endocytosis; Focal adhesion; Gap junction; Regulates Actin and

Cytoskeleton; Pathways in cancer; Colorectal cancer; Glioma; Prost

**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. Studies suggest that this gene plays a role in organ

development, wound healing, and tumor progression. Mutations in this gene have been associated with idiopathic hypereosinophilic syndrome, somatic and familial

gastrointestinal stromal tumors, and a variety of other cancers. [provided by

RefSeq, Mar 2012],

**Function :** catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine

phosphate., disease: A fusion of PDGFRA and FIP1L1 (FIP1L1-PDGFRA), due to

an interstitial chromosomal deletion, is the cause of some cases of

hypereosinophilic syndrome (HES) [MIM:607685]. HES is a rare hematologic disorder characterized by sustained overproduction of eosinophils in the bone marrow, eosinophilia, tissue infiltration and organ damage.,function:Receptor that

binds both PDGFA and PDGFB and has a tyrosine-protein kinase

activity.,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 PDGFRB. Interacts with the SH2 domain of SHB via phosphorylated Tyr-720 (By similarity). Interacts with the

S

Subcellular Location:

Cell membrane; Single-pass type I membrane protein. Cell projection, cilium.

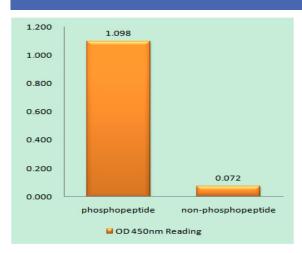
Golgi apparatus.



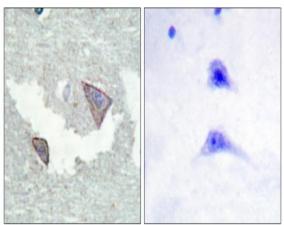
## **Expression:**

Detected in platelets (at protein level). Widely expressed. Detected in brain, fibroblasts, smooth muscle, heart, and embryo. Expressed in primary and metastatic colon tumors and in normal colon tissue.

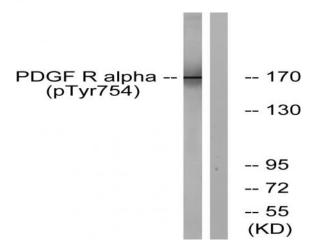
## **Products Images**



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using PDGFR alpha (Phospho-Tyr754) Antibody



Immunohistochemistry analysis of paraffin-embedded human brain, using PDGFR alpha (Phospho-Tyr754) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of PDGFR alpha (Phospho-Tyr754) Antibody. The lane on the right is blocked with the PDGFR alpha (Phospho-Tyr754) peptide.