

PDGFR-α Polyclonal Antibody

Catalog No: YT3635

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: PDGF Receptor a

Gene Name: PDGFRA

Protein Name: Platelet-derived growth factor receptor alpha

P16234

P26618

Human Gene Id: 5156

Human Swiss Prot

No:

Mouse Gene ld: 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. AA range:731-780

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

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

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500-2000 IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:5000. 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)

Molecularweight: 122670

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.

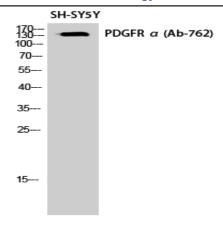
Golgi apparatus.

Expression: Detected in platelets (at protein level). Widely expressed. Detected in brain,

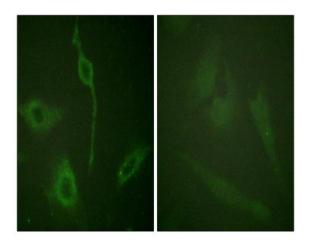
fibroblasts, smooth muscle, heart, and embryo. Expressed in primary and

metastatic colon tumors and in normal colon tissue.

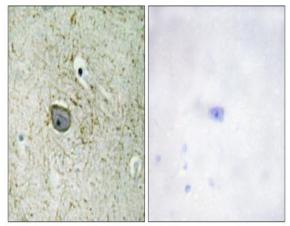
Products Images



Western Blot analysis of SH-SY5Y cells using PDGFR- α Polyclonal Antibody



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



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