Best Tools for immunology Research

PDGFR-β Monoclonal Antibody

Catalog No :	YM0512
Reactivity :	Human;Mouse
Applications :	WB;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;>>PI3K-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 :	Beta-type platelet-derived growth factor receptor
Human Gene Id :	5159
Human Swiss Prot No :	P09619
Mouse Gene Id :	18596
Mouse Swiss Prot No :	P05622
Immunogen :	Purified recombinant fragment of human PDGFR-β expressed in E. Coli.
Specificity :	PDGFR-β Monoclonal Antibody detects endogenous levels of PDGFR-β protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications.

Purification : Affinity purification

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

P References :

1. Biochem Biophys Res Commun. 1997 Jun 27;235(3):455-60.
2. Hum Pathol. 2005 Mar;36(3):242-9.
3. J Virol. 2007 May;81(10):5112-20.

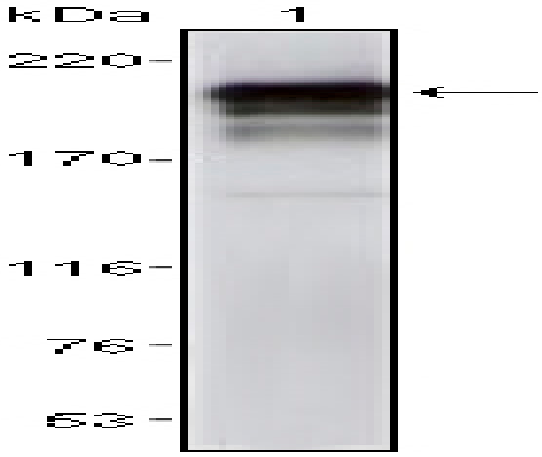
Background : This gene encodes a cell surface tyrosine kinase receptor for members of the platelet-derived growth factor family. These growth factors are mitogens for cells of mesenchymal origin. The identity of the growth factor bound to a receptor monomer determines whether the functional receptor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

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



Western Blot analysis using PDGFR-β Monoclonal Antibody against NIH/3T3 cell lysate (1).