

## Basic Information

Product Name	Anti-PDGFR alpha/PDGFR $\alpha$ Antibody	
Gene Name	PDGFR $\alpha$	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, ICC/IF, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human PDGFR $\alpha$ recombinant protein (Position: Q24-E906).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	180 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Enzyme linked immunosorbent assay (ELISA): 1:100-1000	

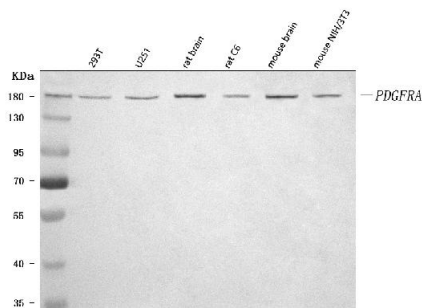
## Storage

12 months from date of receipt, -20°C as supplied.

## Background Information

PDGFR $\alpha$  (Platelet-derived growth factor receptor,  $\alpha$ ), also called PDGFR2, encodes a cell surface tyrosine kinase receptor for members of the platelet-derived growth factor family. The PDGFR $\alpha$  gene is mapped on 4q12. The PDGFR $\alpha$ -FIP1L1 gene is a constitutively activated tyrosine kinase that transforms hematopoietic cells and is a therapeutic target of imatinib. The PDGFR $\alpha$  gene contains 23 exons spanning about 65 kb. Using the human PDGFR $\alpha$  promoter linked to a luciferase reporter, Joosten et al. showed that PAX1 acts as a transcriptional activator of the PDGFR $\alpha$  gene in differentiated human embryonal carcinoma cells. PDGFR $\alpha$  is responsible for mediating cellular contraction of multiple growth factors: TGF $\beta$ 1 and members of the PDGF family. Lei et al. noted that in the rabbit model of the disease, PDGFR $\alpha$  is dramatically more capable of promoting PVR than is the closely related PDGFR $\beta$ . PDGFR $\alpha$  is a critical receptor required for human CMV infection, and thus a target for novel antiviral therapies.

## Selected Validation Data



Western blot analysis of anti-PDGFRα antibody (A00366). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human 293T whole cell lysates,

Lane 2: human U251 whole cell lysates,

Lane 3: rat brain tissue lysates,

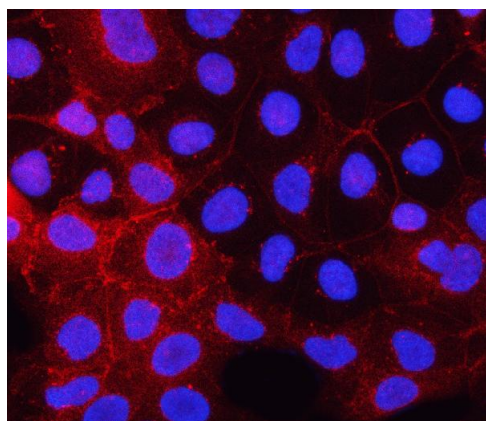
Lane 4: rat C6 whole cell lysates,

Lane 5: mouse brain tissue lysates,

Lane 6: mouse NIH/3T3 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-PDGFRα antigen affinity purified polyclonal antibody (A00366) and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for PDGFRα at approximately 180 kDa. The expected band size for PDGFRα is at 123,180 kDa.



ICC/IF analysis of PDGFRα using anti-PDGFRα antibody (A00366).

PDGFRα was detected in an immunocytochemical section of CACO-2 cells.

Cy3-conjugated Anti-rabbit IgG Secondary Antibody

(red)(Catalog#BA1032) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).