

## PDGFRa mouse Monoclonal Antibody(7A3)

Catalog No: YM3687

**Reactivity:** Human;Rat;Mouse

**Applications:** IF;IHC

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

P16234

Gene Name: PDGFRA

Protein Name: PDGFRA

Human Gene Id: 5156

**Human Swiss Prot** 

No:

Mouse Swiss Prot P26618

No:

NO:

Rat Swiss Prot No: P20786

Immunogen: Synthetic Peptide of PDGFRa at AA range of 1010-1090

Specificity: PDGFRa protein detects endogenous levels of PDGFRA

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

**Source:** Monoclonal, Mouse

**Dilution:** IF 1:50-200 IHC 1:100-200

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**Purification:** The antibody was affinity-purified from mouse ascites by affinity-

chromatography using specific immunogen.

Concentration: 1 mg/ml

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

Observed Band: 180kD

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],

ricioeq, iviai 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.

Tag: orthogonal

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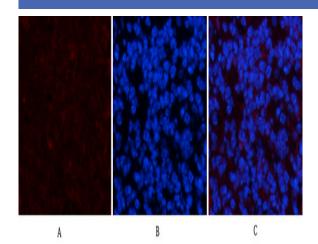
**Sort :** 11757

**No4:** 1

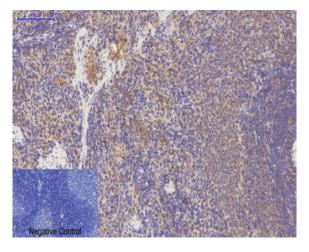
Host: Mouse

Modifications: Unmodified

## **Products Images**



Immunofluorescence analysis of mouse-spleen tissue. 1,PDGFRa Mouse Monoclonal Antibody(7A3)(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunohistochemical analysis of paraffin-embedded Rat-spleen tissue. 1,PDGFRa Mouse Monoclonal Antibody(7A3) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.