

Anti-Murine PDGF receptor alpha (MAB)

Synonyms: Pdgfra, CD140a, Pdgfr-2, Al115593

PLEASE NOTE: ALWAYS CENTRIFUGE VIAL BEFORE OPENING

Size Order# Lot# Expiry Date

100 μg 2170.667.100

Please enquire for bulk quantities and other vial sizes.

Description

The platelet-derived growth factor (PDGF) family consists of proteins derived from four genes (PDGFA, B, C, and D) that form disulfide-linked homodimers (PDGFAA, BB, CC, and DD) and a heterodimer (PDGFAB). These proteins regulate diverse cellular functions by binding to and inducing the homoor heterodimerization of two receptors (PDGF Ra and Rß). Whereas a/a homodimerization is induced by PDGF-AA, BB, CC, and AB, a/ß heterodimerization is induced by PDGF-AB, BB, CC, and DD, and ß/ß homodimerization is induced only by PDGF-BB and DD. Both PDGF Ra and Rß are members of the class III subfamily of receptor tyrosine kinases (RTK) that also includes the receptors for MCSF, SCF, and Flt3 ligand. All class III RTKs are characterized by the presence of five immunoglobulinlike domains in their extracellular region and a split kinase domain in their intracellular region. Ligand-iinduced receptor dimerization results in autophosphorylation in trans resulting in the activation of several intracellular signaling pathways that can lead to cell proliferation, cell survival, cytoskeletal rearrangement, and cell migration. Many cell types, including fibroblasts and smooth muscle cells, express both the a and ß receptors. Others have only the a receptors (oligodendrocyte progenitor cells, mesothelial cells, liver sinusoidal endothelial cells, astrocytes, platelets, and megakaryocytes) or only the ß receptors (myoblasts, capillary endothelial cells, pericytes, T cells, myeloid hematopoietic cells, and macrophages). Recombinant mouse and human soluble PDGF Rß bind PDGF with high affinity and are potent PDGF antagonists.

Source Rat
Isotype IgG2
Clone AB-4 H39

Biological Activity

WB: 1:400-1000; IHC: 1:50-800

Reconstitution

Reconstitute the antibody with 500 μ l sterile PBS and the final concentration is 200 μ g/ml.

Usage: For research use only. Not for use in diagnostic or therapeutic procedures. Not for human use.