

## Anti-Murine PDGF receptor beta (MAB)

Synonyms: Pdgfrb, Pdgfr, CD140b, PDGFR-1, AI528809

*PLEASE NOTE: ALWAYS CENTRIFUGE VIAL BEFORE OPENING*

Size	Order#	Lot#	Expiry Date
100 µg	2175.667.100		

Please enquire for bulk quantities and other vial sizes.

### Description

The platelet-derived growth factor (PDGF) family consists of proteins derived from four genes (PDGF-A, B, C, and D) that form disulfidelinked homodimers (PDGF-AA, BB, CC, and DD) and a heterodimer (PDGF-AB). These proteins regulate diverse cellular functions by binding to and inducing the homo- or heterodimerization of two receptors (PDGF Ra and Rβ). Whereas a/a homodimerization is induced by PDGF-AA, BB, CC, and AB, a/β heterodimerization is induced by PDGF-AB, -BB, CC, and DD, and β/β homodimerization is induced only by PDGF-BB, and DD. Both PDGF-Ra and -Rβ 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 immunoglobulin-like domains in their extracellular region and a split kinase domain in their intracellular region. Ligand-induced 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 β receptors. Others have only the a receptors (oligodendrocyte progenitor cells, mesothelial cells, liver sinusoidal endothelial cells, astrocytes, platelets and megakaryocytes) or only the β receptors (myoblasts, capillary endothelial cells, pericytes, T cells, myeloid hematopoietic cells and macrophages). A soluble PDGF Ra has been detected in normal human plasma and serum as well as in the conditioned medium of the human osteosarcoma cell line MG63. Both the recombinant mouse and human soluble PDGF Ra bind PDGF with high affinity and are potent PDGF antagonists.

- **Source** Rat
- **Isotype** IgG2
- **Clone** AB-5 D65

### Biological Activity

WB: 1:500-1000; IHC: 1:50-200

### Reconstitution

Reconstitute the antibody with 500 µl sterile PBS and the final concentration is 200 µg/ml.

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

\*The Buffer may vary depending on the Lot #. Please contact our technical support if you have specific requirements.