### DESCRIPTION

**Species Reactivity**  
Human

**Specificity**  
Detects human PDGF Rβ in Western blots. Specificity has been confirmed in binding studies using several different cell lines (1, 2) and by its ability to immunoprecipitate PDGF Rβ-subunit complexed with $^{125}$I-PDGF-BB (3). It does not recognize the PDGF Rα-subunit.

**Source**  
Monoclonal Mouse IgG, Clone # PR7212

**Purification**  
Protein A or G purified from ascites

**Immunogen**  
Human skin fibroblast membrane extracts

**Conjugate**  
Phycoerythrin

**Excitation Wavelength:** 488 nm  
**Emission Wavelength:** 565-605 nm

**Formulation**  
Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.

*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

### APPLICATIONS

Please Note:  
Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

**Recommended Concentration**  
Sample

| Flow Cytometry | 10 µL/10⁶ cells | See Below |

### DATA

**Flow Cytometry**

Detection of PDGF Rβ in MG-63 Human Cell Line by Flow Cytometry. MG-63 human osteosarcoma cell line was stained with Mouse Anti-Human PDGF Rβ PE-conjugated Monoclonal Antibody (Catalog # FAB1263P, filled histogram) or isotype control antibody (Catalog # IC002P, open histogram). View our protocol for Staining Membrane-associated Proteins.

### PREPARATION AND STORAGE

**Shipping**  
The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage**  
Protect from light. Do not freeze.

- 12 months from date of receipt, 2 to 8 °C as supplied.

### BACKGROUND

PDGF is a major serum mitogen that can exist as a homo or hetero-dimeric protein consisting of disulfide-linked PDGF-A and PDGF-B chains. The PDGF-AA, PDGF-BB and PDGF-AB isoforms have been shown to bind to two distinct cell surface PDGF receptors with different affinities. Where as PDGF Rα binds all three PDGF isoforms with high affinity, PDGF Rβ binds PDGF-BB only with high-affinity. Both PDGF Rα and PDGF Rβ are members of the class III subfamily of receptor tyrosine kinases (RTK) that also includes the receptors for M-CSF, SCF and Flt-3 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. PDGF binding induces receptor homo- and hetero-dimerization and signal transduction. The expression of the α and β receptors is independently regulated in various cell types. Recombinant soluble PDGF Rβ binds PDGF with high affinity and is a potent PDGF antagonist (4).

### References: