

**PDGF-BB**  
**Catalog # PVGS1647****Specification**

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**PDGF-BB - Product Information**

Primary Accession [P31240](#)  
**Species**  
Mouse

**Sequence**  
Ser82-Thr190

**Purity**  
> 95% as analyzed by SDS-PAGE

**Endotoxin Level**  
< 1 EU/ µg of protein by LAL method

**Biological Activity**  
Measured in a cell proliferation assay using Balb/c3T3 mouse fibroblast cells. The ED<sub>50</sub> for this effect is 1.55 ng/ml.

**Expression System**  
E. coli

Formulation **Lyophilized from a 0.2 µm filtered solution in 4 mM HCl.**

**Reconstitution**  
It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in 4 mM HCl up to 100 µg/ml.

**Storage & Stability**  
Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4-7°C and up to 3 months at -20°C or below. Avoid repeated freeze-thaw cycles.

**PDGF-BB - Additional Information**

**Gene ID** 18591

**Other Names**  
Platelet-derived growth factor subunit B, PDGF subunit B, PDGF-2, Platelet-derived growth factor B chain, Platelet-derived growth factor beta polypeptide, Proto-oncogene c-Sis, Pdgfb, Sis

**Target Background**  
Platelet-Derived Growth Factor Subunit B (PDGFB) belongs to the PDGF/VEGF growth factor family. Platelet-derived growth factor is a potent mitogen for cells of mesenchymal origin. PDGFB can exist either as a homodimer (PDGF-BB) or as a heterodimer with the platelet-derived growth factor alpha polypeptide (PDGF-AB), where the dimers are connected by disulfide bonds. As growth

factor, it plays an essential role in the regulation of embryonic development, cell proliferation, cell migration, survival and chemotaxis. It is required for normal proliferation and recruitment of pericytes and vascular smooth muscle cells in the central nervous system, skin, lung, heart and placenta. PDGFB also plays an important role in wound healing.

## **PDGF-BB - Protein Information**

**Name** Pdgfb

**Synonyms** Sis

### **Function**

Growth factor that plays an essential role in the regulation of embryonic development, cell proliferation, cell migration, survival and chemotaxis. Potent mitogen for cells of mesenchymal origin. Required for normal proliferation and recruitment of pericytes and vascular smooth muscle cells in the central nervous system, skin, lung, heart and placenta. Required for normal blood vessel development, and for normal development of kidney glomeruli. Plays an important role in wound healing. Signaling is modulated by the formation of heterodimers with PDGFA.

### **Cellular Location**

Secreted. Note=Released by platelets upon wounding.

### **Tissue Location**

Localized to vascular smooth muscle cells. Also weakly expressed by cortical interstitial cells but absent in tubules Up-regulated in areas of renal fibrosis. In mice with unilateral ureteral obstruction, an increased expression in interstitial cells and in some tubules observed after day 4.

## **PDGF-BB - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## **PDGF-BB - Images**