

## PDGF-BB

Catalog # PVGS1678

## **Product Information**

Primary Accession P01127
Species Human

**Sequence** Ser82-Thr190

**Purity** ≥ 98% as analyzed by SDS-PAGE

**Endotoxin Level** ≤ 0.2 EU/ □g of protein by gel clotting method

**Biological Activity** Measured in a cell proliferation assay using BALB/c 3T3 cells, the ED<sub>50</sub> for this

effect is less than 10 ng/ml

**Expression System** E. coli

Theoretical Molecular Weight 24.8 kDa

**Formulation**Lyophilized from a 0.2 Im filtered solution in 20 mM NaAc-HAc, pH 4.5.

It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in

distilled water up to 100 g/ml.

**Storage & Stability** Upon receiving, this product remains stable for up to 6 months at lower than

-70°C. Upon reconstitution, the product should be stable for up to 1 week at

4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

## **Additional Information**

**Gene ID** 5155

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, Becaplermin, PDGFB, PDGF2, SIS

**Target Background** Platelet-derived growth factor (PDGF) presenting in serum but absent from

plasma was first discovered in animal study by Lynch and co-workers in the late 1980s. It is a disulfide-linked dimer consisting of two peptides-chain A and chain B. PDGF has three subforms: PDGF-AA, PDGF-BB, PDGF-AB. It is involved in a number of biological processes, including hyperplasia, embryonic neuron development, chemotaxis, and respiratory tubule epithelial cell development. The function of PDGF is mediated by two

receptors (PDGFR-α and PDGFR-β).

## **Protein Information**

Name PDGFB

**Synonyms** PDGF2, 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 (PubMed: 26599395). 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 (By

similarity).

**Cellular Location** Secreted. Note=Released by platelets upon wounding

**Tissue Location** Expressed at high levels in the heart, brain (sustantia nigra), placenta and

fetal kidney. Expressed at moderate levels in the brain (hippocampus),

skeletal muscle, kidney and lung

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.