

PDGF-BB
Catalog # PVGS1678**Specification**

PDGF-BB - Product Information

Primary Accession [P01127](#)
Species
Human

Sequence
Ser82-Thr190

Purity
≥ 98% as analyzed by SDS-PAGE

Endotoxin Level
≤ 0.2 EU/ µg of protein by gel clotting method

Biological Activity
Measured in a cell proliferation assay using BALB/c 3T3 cells, the ED₅₀ 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 µm filtered solution in 20 mM NaAc-HAc, pH 4.5.**

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 distilled water up to 100 µg/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.

PDGF-BB - 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).

PDGF-BB - 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:<<http://www.uniprot.org/citations/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 (substantia nigra), placenta and fetal kidney. Expressed at moderate levels in the brain (hippocampus), skeletal muscle, kidney and lung

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