

PDGF-BB
Catalog # PVGS1167**Specification**

PDGF-BB - Product Information

Primary Accession [P01127](#)
Species
Human

Sequence
Ser82-Thr190, expressed with an N-terminal Met

Purity
> 97% as analyzed by SDS-PAGE
> 97% as analyzed by HPLC

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

Biological Activity
Fully biologically active when compared to standard. The ED₅₀ as determined by a cell proliferation assay using murine Balb/c 3T3 cells is less than 3.0 ng/ml, corresponding to a specific activity of > 3.3 × 10⁵ IU/mg.

Expression System
E. coli

Theoretical Molecular Weight
24.8 kDa

Formulation **Lyophilized from a 0.2 µm filtered solution in PBS, pH 7.4.**

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 sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/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°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-BB (PDGF-BB) is one of five dimers (PDGF-AA, AB, BB, CC, and DD) formed by 4 different PDGF subunits. In vivo, PDGF-BB is mainly produced in heart and placenta, and predominantly expressed by osteoblasts, fibroblasts, smooth muscle cells, and glial cells. An inactive precursor of PDGF-BB is produced in the endoplasmic reticulum and then activated by a proprotein convertase after secretion. PDGF-BB functions in a paracrine manner and promotes organogenesis, human skeletal development, and wound healing. PDGF-BB also promotes angiogenesis, particularly in the presence of Fibroblast Growth Factor basic. Therefore, PDGF-BB and its related pathways are potential pharmacological targets.

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:<

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