

PDGF-BB
Catalog # PVGS1019**Specification**

PDGF-BB - Product Information

Primary Accession [P01127](#)
Species
Human

Sequence
Ser82-Thr190

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

Endotoxin Level
< 1 EU/ µg of protein by gel clotting method

Biological Activity
ED₅₀ < 3.0 ng/ml, measured by the dose-dependent stimulation of the proliferation of Balb/c 3T3 cells, corresponding to a specific activity of > 3.3 × 10⁵ units/mg.

Expression System
P. pastoris

Formulation **Lyophilized after extensive dialysis against 10 mM acetic acid.**

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 ddH₂O 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. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. 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: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

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