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## PDGF-BB

Catalog # PVGS1019

## **Product Information**

Primary Accession P01127
Species Human

**Sequence** Ser82-Thr190

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

> 97% as analyzed by HPLC

**Endotoxin Level** 

**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

ddH<sub>2</sub>O 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. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. 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

polypeptide, 1 Toto offcogene e 313, Decapiermin, 1 Dai 2, 1 Dai 2, 313

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.

## **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'.