10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PDGF-BB

Catalog # PVGS1324

Product Information

Primary Accession	Q05028
Species	Rat
Sequence	Ser74-Thr182, expressed with an N-terminal Met
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level	
Expression System	E. coli
Formulation	Lyophilized after extensive dialysis against 20 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 20 mM acetic acid 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	24628
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, Pdgfb
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
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. 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 in a distinct subpopulation of smooth muscle cells in injured arteries