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

PDGF-BB

Catalog # PVGS1647

Product Information

Primary Accession	P31240
Species	Mouse
Sequence	Ser82-Thr190
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level	
Biological Activity	Measured in a cell proliferation assay using Balb/c3T3 mouse fibroblast cells. The ED_{50} for this effect is 1.55 ng/ml.
Expression System	E. coli
Formulation	Lyophilized from a 0.2 μm filtered solution in 4 mM HCl.
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 4 mM HCl up to 100 μg/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 4-7°C and up to 3 months at -20 °C or below. Avoid repeated freeze-thaw cycles.

Additional Information

Gene ID	18591
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, Pdgfb, Sis
Target Background	Platelet-Derived Growth Factor Subunit B (PDGFB) belongs to the PDGF/VEGF growth factor family. Platelet-derived growth factor is a potent mitogen for cells of mesenchymal origin. PDGFB can exist either as a homodimer (PDGF-BB) or as a heterodimer with the platelet-derived growth factor alpha polypeptide (PDGF-AB), where the dimers are connected by disulfide bonds. As growth factor, it plays an essential role in the regulation of embryonic development, cell proliferation, cell migration, survival and chemotaxis. It is required for normal proliferation and recruitment of pericytes and vascular smooth muscle cells in the central nervous system, skin, lung, heart and placenta. PDGFB also plays an important role in wound healing.

Protein Information

Name	Pdgfb
Synonyms	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. 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.
Cellular Location	Secreted. Note=Released by platelets upon wounding.
Tissue Location	Localized to vascular smooth muscle cells. Also weakly expressed by cortical interstitial cells but absent in tubules Up-regulated in areas of renal fibrosis. In mice with unilateral ureteral obstruction, an increased expression in interstitial cells and in some tubules observed after day 4.