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PDGF-BB

Catalog # PVGS1678

Product Information

Primary Accession	P01127
Species	Human
Sequence	Ser82-Thr190
Purity	≥ 98% as analyzed by SDS-PAGE
Endotoxin Level	≤ 0.2 EU/ μg of protein by gel clotting method
Biological Activity	Measured in a cell proliferation assay using BALB/c 3T3 cells, the ED_{50} for this effect is less than 10 ng/ml
Expression System	E. coli
Theoretical Molecular Weight	24.8 kDa
Formulation	Lyophilized from a 0.2 μm filtered solution in 20 mM NaAc-HAc, pH 4.5.
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 distilled water 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. 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
Target Background	Platelet-derived growth factor (PDGF) presenting in serum but absent from plasma was first discovered in animal study by Lynch and co-workers in the late 1980s. It is a disulfide-linked dimer consisting of two peptides-chain A and chain B. PDGF has three subforms: PDGF-AA, PDGF-BB, PDGF-AB. It is involved in a number of biological processes, including hyperplasia, embryonic neuron development, chemotaxis, and respiratory tubule epithelial cell development. The function of PDGF is mediated by two receptors (PDGFR-α and PDGFR-β).

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