

Active Recombinant Human PDGFB Protein, Biotinylated

Cat. No. PDGFB-168H Lot. No. (See product label)

SPECIFICATION

Product Overview Recombinant Human PDGFB(Ser82-Thr190) was expressed in E. coli, Biotinylated.

Species Human

Source Mammalian Cells

ProteinLength Ser82-Thr190

Description

Platelet-Derived Growth Factor (PDGF)-BB is synthesized as a 35 kDa, 241 amino acid (aa) prepro-precursor. It contains a signal peptide, an N-terminal prodomain, a mature region, and a C-terminal prodomain. The propercursor is initially dimerized and then intracellularly processed twice. The N-terminal prodomain is cleaved first, followed by cleavage of the C-terminal prodomain. The resulting mature region is 16-17 kDa in size (or 29-32 kDa as a homodimer). Mature human PDGF-B shares 89% aa sequence identity with mouse mature PDGF-B. PDGF-BB is expressed by hepatocytes and nonresorbing osteoclasts, generating osteoblasts and bone formation. It is also produced by platelets, macrophages, and mast cells. At sites of injury, it promotes neutrophil and macrophage infiltration for debridement, fibroblast secretion of new extracellular matrix, and IGF-I-mediated re-epithelialization. The traditional receptor for PDGF is either a homodimer or heterodimer created from two type I transmembrane RTKs, PDGF R alpha and PDGF R beta. PDGF-BB has been shown to bind the alpha alpha homodimer, alpha beta heterodimer, and the beta beta homodimer in vitro, and act through the beta beta homodimer in vivo

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Form	Lyophilized from a 0.2 µm filtered solution in HCl with BSA as a carrier protein.
Bio-activity	Measured in a cell proliferation assay using NR6R-3T3 mouse fibroblast cells. Raines, E.W. et al. (1985) Methods Enzymol. 109:749. The ED50 for this effect is 1.5-6 ng/mL.
Molecular Mass	Predicted Molecular Mass: 12 kDa; SDS-PAGE: 12 kDa, reducing conditions.
Endotoxin	<1.0 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE with silver staining
Notes	Structure / Form: Disulfide-linked homodimer
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile
Reconstitution	Reconstitute at 100 µg/mL in 4 mM HCl.
Conjugation	Biotin

GENE INFORMATION

Gene Name	PDGFB platelet-derived growth factor beta polypeptide [Homo sapiens]
Official Symbol	PDGFB
Synonyms	PDGFB; platelet-derived growth factor beta polypeptide; platelet derived growth factor

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beta polypeptide (simian sarcoma viral (v sis) oncogene homolog) , SIS; platelet-derived growth factor subunit B; becaplermin; oncogene SIS; SSV; PDGF-2; PDGF, B chain; PDGF subunit B; proto-oncogene c-Sis; platelet-derived growth factor 2; platelet-derived growth factor B chain; platelet-derived growth factor, B chain; Platelet-derived growth factor, beta polypeptide (oncogene SIS); platelet-derived growth factor beta polypeptide (simian sarcoma viral (v-sis) oncogene homolog); SIS; PDGF2; c-sis; FLJ12858;

Gene ID [5155](#)

mRNA Refseq [NM_002608](#)

Protein Refseq [NP_002599](#)

MIM [190040](#)

UniProt ID [P01127](#)

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