PDGF-BB Protein, Human (His)

Cat. No.:	HY-P7055B
Synonyms:	rHuPDGF-BB; PDGF-2; GDGF; ODGF; SIS; SSV
Species:	Human
Source:	E. coli
Accession:	P01127 (S82-T190)
Gene ID:	5155
Molecular Weight:	approximately 15 kDa

PROPERTIES

AA Sequence	S L G S L T I A E P A M I A E C K T R T E V F E I S R R L I D R T N A N F L V W P P C V E V Q R C S G C C N N R N V Q C R P T Q V Q L R P V Q V R K I E I V R K K P I F K K A T V T L E D H L A C K C E T V A A A R P V T
Biological Activity	Measured in a cell proliferation assay using NIH 3T3 mouse fibroblast cells. The ED_{50} for this effect is 5.712 ng/mL, corresponding to a specific activity is 1.751×10^5 units/mg.
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 μm filtered solution of 50 mM Tris-HCL, 300 mM NaCl, 200 mM arginine, pH 8.0.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	GMP PDGF-BB Protein, a pivotal growth factor, assumes a central role in regulating embryonic development, cell proliferation, migration, survival, and chemotaxis. Renowned for its potent mitogenic effects on mesenchymal cells, GMP PDGF-BB is indispensable for the normal proliferation and recruitment of pericytes and vascular smooth muscle cells in various tissues, including the central nervous system, skin, lung, heart, and placenta. Its vital contributions extend to the development of blood vessels and kidney glomeruli, highlighting its significance in vascular and renal physiology. A key participant in wound healing, GMP PDGF-BB's signaling dynamics are finely tuned through heterodimer formation with

PDGFA. Present as an antiparallel homodimer, GMP PDGF-BB engages in disulfide-linked interactions with PDGFRA and PDGFRB homodimers, as well as with heterodimers formed by PDGFRA and PDGFRB. Additionally, it forms antiparallel heterodimers with PDGFA, further diversifying its regulatory repertoire. Notably, GMP PDGF-BB establishes connections with XLKD1, LRP1, and SORL1, contributing to a network of interactions that modulate its multifaceted functions.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA