PDGF-BB Protein, Human (P.pastoris, His)

Cat. No.:	HY-P73351
Synonyms:	Platelet-derived growth factor subunit B; PDGF subunit B; PDGF2; PDGFB; SIS
Species:	Human
Source:	P. pastoris
Accession:	P01127 (S82-T190)
Gene ID:	5155
Molecular Weight:	Approximately 14.3 kDa

PROPERTIES

Biological Activity	Measured by its binding ability in a functional ELISA. Immobilized Human PDGF-B His at 2 μg/mL (100 μl/well) can bind Human PDGFRBHis & hFc, the EC_{50} of Human PDGFRBHis & hFc is 9.0-40.0 ng/mL.
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, 25% Glycerol, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
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.
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.

Caution: Product has not been fully validated for medical applications. For research use only.

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