

GMP HumanKine[®] PDGFbb (Recombinant Human)



Animal Component-Free

Human cell expressed

Tag-Free

Endotoxin Free

Product Description

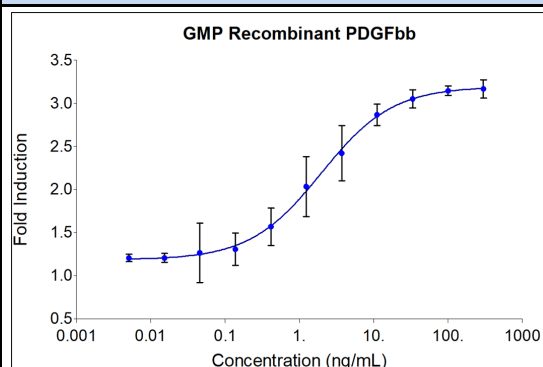
Animal-free Recombinant Human PDGFbb is a growth factor that promotes blood vessel formation, mitogenesis, chemotaxis, etc. The PDGF family members (four homodimers and one heterodimer) are secreted, disulfide-linked dimeric glycoproteins that regulate their cellular functions through interaction with PDGFR receptors. PDGFbb is synthesized, stored, and released by alpha granules of platelets. It is also known as PDGF-2, becaptermin, or GDGF. Dysregulation in PDGF signaling has been shown to be associated with tumorigenesis and progression of cancer. Recombinant PDGFbb is used in treatment of chronic ulcers and to speed healing in surgical procedures.

Alternative Names	Becaplermin, c sis, FLJ12858, PDGF 2, PDGF subunit B, PDGF2, PDGFB, PDGFbb, Proto oncogene c Sis, SIS, SSV
Accession Number	P01127
Source	Human Embryonic Kidney cells (HEK293). HEK293-derived PDGFbb protein
Species Reactivity	human,mouse
Adventitious Virus	Master Cell Bank tested Negative for Adventitious Viruses

Specifications

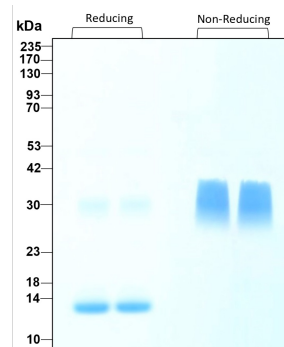
Test	Method	Specification
Activity	Dose-dependent proliferation of the NIH/3T3 mouse fibroblast cell line.	0.3-3 ng/mL
Molecular Mass	SDS-PAGE	14 and 36 kDa reduced, 29 to 32 kDa non-reduced, homodimer, glycosylated
Purity	SDS-PAGE	>95%
Endotoxin	LAL	<0.1 EU/μg
Mycoplasma	PCR	Not Detected

Activity Data



GMP-grade recombinant human PDGFbb (HZ-1308-GMP) stimulates dose-dependent proliferation of the NIH/3T3 mouse fibroblast cell line. Viable cell number was quantitatively assessed by Prestoblu Cell Viability Reagent. NIH/3T3 cells were serum starved with 0.1% FBS for 24 hours before treatment with increasing concentrations of recombinant human PDGFbb.

SDS-PAGE



Purity of recombinant human PDGFbb was determined by SDS- polyacrylamide gel electrophoresis. The protein was resolved in an SDS- polyacrylamide gel in reducing and non-reducing conditions and stained using Coomassie blue.

Preparation	
Shipping Temperature	ambient temperature
Formulation	50mM Acetate pH 3.5 + 500mM NaCl, See Certificate of Analysis for details
Reconstitution	Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein to 0.2 mg/mL in sterile 1x PBS pH 7.4 containing 0.1% endotoxin-free recombinant human serum albumin (HSA). Gently swirl or tap vial to mix.

Stability and Storage	Product Form	Temperature Conditions	Storage Time (From Date of Receipt)
	Lyophilized	-20°C to -80°C	Until Expiry Date
	Lyophilized	Room Temperature	2 weeks
	Reconstituted as per CofA	-20°C to -80°C	6 months
	Reconstituted as per CofA	4°C	1 week
Avoid repeated freeze-thaw cycles.			

Proteintech GMP Quality Policy HumanKine® GMP Proteins

In vitro recombinant protein production can be prone to variability due to various reasons ranging from quality of raw materials to inconsistency in the process. Therefore, HumanKine®, a proteintech brand's GMP proteins are produced and tested under an ISO 13485 certified quality management system in a clean room facility. Proteintech manufactures the GMP HumanKine® products according to the applicable sections in the following documents: USP Chapter 1043 (Ancillary Materials for Cell, Gene, and Tissue-Engineered Products, USP Chapter 92 (Growth Factors and Cytokines Used in Cell Therapy Manufacturing), WHO TRS, No. 822, 1992 Annex 1 (Good Manufacturing Practices for Biological Products), Ph. Eur. General Chapter 5.2.12, and EudraLex – Volume 4 – Part IV (Guidelines on GMP specific to ATMPs). Proteintech strives to achieve the utmost quality GMP raw material ensuring all applicable guidelines are taken into consideration.

The QMS is built to provide our customers with consistent and pure product delivered by documented processes, qualified personnel, validated processes, qualified equipment, qualified vendors, and a stringent final product release process. Although the final product release process is important, Proteintech performs in-process QC steps after each major manufacturing stage. Production records and facilities may be available for an inspection by approved personnel.

Our GMP policy covers all the aspects of production; from raw materials, facility, equipment, and Instruments to training and personal hygiene of staff. It also guarantees that the process is explicit, validated and well documented for transparency and traceability.

www.ptglab.com

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