

## **Recombinant Human Platelet-derived Growth Factor-BB GMP** (rHuPDGF-BB GMP)

## PrimeGene Technical DataSheet

Catalog Number:

GMP-105-10

Source:

Escherichia coli

**Molecular Weight:** 

Approximately 24.8 kDa, a disulfide-linked homodimeric protein containing two 110 amino acid

residues polypeptide (B chain).

Size:

 $5 \mu g/100 \mu g/1 mg$ 

**Sequence:** 

MSLGSLTIAE PAMIAECKTR TEVFEISRRL IDRTNANFLV WPPCVEVQRC SGCCNNRNVQ

CRPTQVQLRP VQVRKIEIVR KKPIFKKATV TLEDHLACKC ETVAAARPVT

**Purity:** 

> 98% by SDS-PAGE and HPLC analyses.

**Biological Activity:** 

Fully biologically active when compared to standard. The ED<sub>50</sub> as determined by a cell proliferation

assay using murine Balb/c 3T3 cells is less than 3 ng/mL, corresponding to a specific activity of > 3.3

 $\times$  10<sup>5</sup> U/mg.

**Physical Appearance:** 

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation:

Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.

**Endotoxin:** 

Less than 0.01 EU/μg of rHuPDGF-BB GMP as determined by LAL method.

**Sterility:** 

Negative.

Mycoplasma:

Negative.

**Host Cell Protein:** 

Less than 0.05% when tested by ELISA.

**Host Cell DNA:** 

Less than 20 ng/mg when tested by qPCR.

In Vitro Virus Assay:

Negative.

**Reconstitution:** 

Prior to opening, it is recommended to centrifuge the vial briefly to bring the contents down the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. If animal-origin-free condition is expected in your product, then sterile distilled water is recommended. Stock solutions should be apportioned into working aliquots and stored at  $\leq$  -20 °C. Further dilutions should be made in appropriate buffered solutions.

Shipping:

The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage:** 

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

A minimum of 12 months from date of receipt, when stored at  $\leq$  -20 °C as supplied.

1 month, 2 to 8 °C under sterile conditions after reconstitution.

3 months, -20 to -70 °C under sterile conditions after reconstitution.

Refer to lot-specific CoA for the Expiry Date.

Usage:

This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory, or further evaluation purposes. NOT FOR HUMAN USE.

**Quality Statement:** 

The manufacturing and testing of these products comply with ICH Q7 guidelines.

Shanghai PrimeGene Bio-Tech Co., Ltd.

Website: www.primegene.com.cn Tel: +86 21 52380373

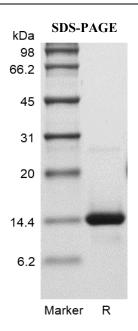
Website: www.primegene.com Email: info.pg@bio-techne.com Fax: +86 21 61077348

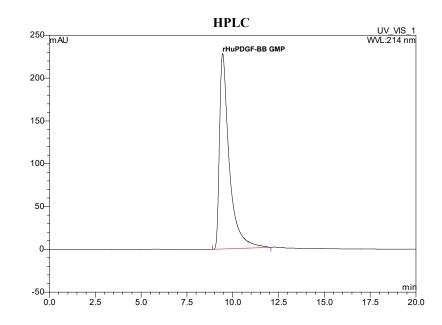
Page: 1/2



## Recombinant Human Platelet-derived Growth Factor-BB GMP (rHuPDGF-BB GMP)

PrimeGene Technical DataSheet





## **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).

Rev. 06/13/2023 V.5

Tel: +86 21 52380373

Website: www.primegene.com Fax: +86 21 61077348 Email: info.pg@bio-techne.com

Page: 2 / 2