

Recombinant Human Platelet-derived Growth Factor-BB

#R00139

Size: 10 µg/100 µg/500 µg

Stability & Storage

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

- 12 months from date of receipt, -20 to -70 °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.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

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).

AA Sequence

MSLGSLTIAEPAMIAECKTRTEVFEISRRLLIDRTNANFL
VWPPCVEVQRCSGCCNNRNVQCRPTQVQLRPVQV
RKIEIVRKKPIFKKATVTLEDHLACKCETVAAARPVT

Reconstitution

We recommend that this vial be briefly centrifuged prior

to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Product Specification

Synonyms	Glioma-derived Growth Factor, GDGF, Osteosarcoma-derived Growth Factor, ODGF, PDGF-2, Platelet-derived Growth Factor Beta Polypeptide, Becaplermin
Accession	P01127
GeneID	5155
Species	Human
Source	Escherichia coli.
Molecular Weight	Approximately 24.8 kDa, a disulfide-linked homodimeric protein containing two 110 amino acid residues polypeptide (B chain).
Purity	> 97 % by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀

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 $> 3.3 \times 10^5$ IU/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 1 EU/ μg of rHuPDGF-BB as determined by LAL method.