

Recombinant Rat Platelet-derived Growth Factor-BB (rRtPDGF-BB)

PrimeGene Technical Data Sheet

Catalog Number:	145-10
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 24.4 kDa, a disulfide-linked homodimeric protein containing two 109 amino acid residues polypeptide (B chain).
Quantity:	2μg/10μg/1000μg
AA Sequence:	SLGSLAAAEP AVIAECKTRT EVFQISRNLIDRTNANFLVW PPCVEVQRCS GCCNNRNVQC RASQVQMRPV QVRKIEIVRK KPVFKKATVT LEDHLACKCE TVVTTPRPVT
Purity:	> 98 % 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 2.0 ng/ml, corresponding to a specific activity of > 5.0 × 10 ⁵ IU/mg.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 μm filtered concentrated solution in 1 × PBS, pH 6.9.
Endotoxin:	Less than 0.1 EU/μg of rRtPDGF-BB as determined by LAL method.
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.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 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.
Usage:	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE.

Rat Platelet-derived Growth Factor-BB

Platelet-derived growth factor is a dimeric glycoprotein composed of two A (-AA) or two B (-BB) chains or a combination of the two (-AB). All PDGFs function as secreted, disulfide-linked homodimers, but only PDGFA and B can form functional heterodimers. PDGFs are mitogenic during early developmental stages, driving the proliferation of undifferentiated mesenchyme and some progenitor populations. PDGF is a required element in cellular division for fibroblasts, a type of connective tissue cell that is especially prevalent in wound healing. In essence, the PDGFs allow a cell to skip the G1 checkpoints in order to divide. Recombinant rat PDGF-AA contains 109 amino acids and has a molecular mass of 12.2 kDa.