

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant PDGF-BB, Rat

Catalog Number: BK0153-1mg

Source: Escherichia coli.

Quantity: 1mg

Description:

Platelet-Derived Growth Factor-BB (PDGF-BB) is one of five dimers (PDGF-AA, AB, BB, CC, and DD) formed by 4 different PDGF subunits. In vivo, PDGF-BB is mainly produced in heart and placenta, and predominantly expressed by osteoblasts, fibroblasts, smooth muscle cells, and glial cells. An inactive precursor of PDGF-BB is produced in the endoplasmic reticulum and then activated by a proprotein convertase after secretion. PDGF-BB functions in a paracrine manner and promotes organogenesis, human skeletal development, and wound healing. PDGF-BB also promotes angiogenesis, particularly in the presence of Fibroblast Growth Factor basic. Therefore, PDGF-BB and its related pathways are potential pharmacological targets. Recombinant rat Platelet-Derived Growth Factor-BB (rrPDGF-BB) produced in E.coli is a disulfide-linked homodimer containing two non-glycosylated polypeptide chains of 110 amino acids each. A fully biologically active molecule, rrPDGF-BB has a molecular mass of 24.6 kDa analyzed by non-reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

Molecular Weight:

24.6 kDa, observed by non-reducing SDS-PAGE.

Purity:

> 95% by SDS-PAGE analysis.

Biological Activity:

ED50 < 2 ng/mL, measured by a cell proliferation assay using 3T3 Cells, corresponding to a specific activity of > 5 × 10⁵ units/mg.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized after extensive dialysis against 20 mM acetic acid.

AA Sequence:

MSLGSLAAAEPAVIAECK-
TRTEVFQISRNLIDRTNANFLVWPPCVEVQRCSG
CCNNRNVQCRASQVQMRPVQVRKIEIVRK-
KPVFKKATVTLEDHLACKCETVVTTPRPVT

Endotoxin:

< 0.2 EU/μg, determined by LAL method.

Reconstitution:

Reconstituted in 20 mM acetic acid at 100 μg/mL.

Storage:

Lyophilized recombinant rat Platelet-Derived Growth Factor-BB (rrPDGF-BB) remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, rrPDGF-BB remains stable up to 2 weeks at 4 °C or up to 3 months at -20 °C.

Usage:

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