

PDGF-BB, Mouse

Cat. No.: Z03096-1

Size: 1.0 mg

Synonyms: PDGF-2, GDGF, ODGF, SIS, SSV

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, development of human skeleton, 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 mouse Platelet-Derived Growth Factor-BB (rmPDGF-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, rmPDGF-BB has a molecular mass of 24.7 kDa analyzed by non-reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

Amino Acid Sequence:

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00001 MSLGSLAAAE PAVIAECKTR TEVFAQISRNL IDRTNANFLV
00041 WPPCVEVQRC SGCCNRRNVQ CRASQVQMRP VQVRKIEIVR
00081 KKPIFKKATV TLEDHLACKC ETIVTPRPVT
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Source: *E. coli*

Species: Mouse

Biological Activity: ED₅₀ < 2.5 ng/mL, measured by a cell proliferation assay using 3T3 Cells, corresponding to a specific activity of > 4 × 10⁵ units/mg.

Molecular Weight: 24.7 kDa, observed by non-reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against 10 mM Sodium Citrate, pH 3.0.

Reconstitution: Reconstituted in ddH₂O at 100 µg/mL.

Purity: > 95% by SDS-PAGE analysis.

Endotoxin Level: < 0.2 EU/µg, determined by LAL method.

Storage: Lyophilized recombinant mouse Platelet-Derived Growth Factor-BB (rmPDGF-BB) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rmPDGF-BB remains stable up to 2 weeks at 4°C or up to 3 months at -20°C.