

# Human PDGF-BB Recombinant Protein Carrier-Free

Catalog Number: 34-8501

Also known as: Platelet-Derived Growth Factor BB RUO: For Research Use Only. Not for use in diagnostic procedures.



**Product Information** 

Contents: Human PDGF-BB Recombinant Protein Carrier-Free [REF] Catalog Number: 34-8501

Concentration: 0.5 mg/mL Handling Conditions: For best recovery, quick-spin vial prior to opening. Use in a sterile environment. Source: E. coli expressed amino acids Ser67-Thr175, accession number NM 002608 Molecular Mass: 24.9 kDa Purity: > 95%, as determined by SDS-PAGE Endotoxin: Less than 0.01 ng/ug cytokine as determined by the LAL assay. Bioactivity: The ED50 of this protein, as measured by Balb/c-3T3 proliferation, is less than or equal to 30 ng/mL. This corresponds to a specific activity of greater than or equal to 3.3 x 10e4 Units/mg.

Proliferation of Balb/c-3T3 cells in response to Human

**Formulation:** Sterile liquid: 0.1 M glycine, pH 3.0 **Temperature Limitation:** Store at less than or equal to -70°C.

**Batch Code:** Refer to vial

PDGF-BB Recombinant Protein

Use By: Refer to vial

X

### Description

PDGF-BB is a member of the platelet-derived growth factor family, a group of proteins that are released by platelets upon activation. The PDGF proteins are dimers of two of four peptide chains designated A, B, C, and D. PDGF-BB is formed by two B-chains, while PDGF-AB is one B chain and one A-chain forming the only heterodimer in the family. PDGF-BB is unique among the family in that it can bind to and activate all three forms of the PDGF receptor. It induces the proliferation, migration, and survival of fibroblasts, endothelial cells, epithelial cells, and smooth muscle cells. PDGF-BB is important for angiogenesis and smooth muscle formation during embryonic development, and plays a role in wound healing and regeneration in adults. High levels of PDGF-BB are often detected in malignant tumors, and it is believed to facilitate tumor metastasis and vascularization.

### **Applications Reported**

Human PDGF-BB Recombinant Protein Carrier-Free is biologically active.

### **Applications Tested**

The ED50 of this protein, as measured by Balb/c-3T3 proliferation, is less than or equal to 30 ng/mL. This



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#### References

Nissen LJ, Cao R, Hedlund EM, Wang Z, Zhao X, Wetterskog D, Funa K, Brakenhielm E, Cao Y. Angiogenic factors FGF2 and PDGF-BB synergistically promote murine tumor neovascularization and metastasis. J Clin Invest. 2007 Oct;117(10):2766-77.

Cao Y. Direct role of PDGF-BB in lymphangiogenesis and lymphatic metastasis. Cell Cycle. 2005 Feb;4(2):228-30.

Kamimura M, Bea F, Akizawa T, Katus HA, Kreuzer J, Viedt C. Platelet-derived growth factor induces tissue factor expression in vascular smooth muscle cells via activation of Egr-1. Hypertension. 2004 Dec;44(6):944-51.

#### **Related Products**

14-8003 Mouse PDGF-BB Recombinant Protein BMS82071FF\* Human PDGF-BB FlowCytomix Simplex