

# Platelet Derived Growth Factor-BB, human recombinant (rHuPDGF-BB)

Catalog No: 95033 Lot No: XXXXX Source: *E. coli* 

**Synonyms:** Glioma-derived growth factor, GDGF, Osteosarcoma-derived Growth Factor, ODGF, SIS, SSV, PDGF2, c-sis,

FLJ12858, PDGF-BB, PDGF B-chain, Platelet-derived growth factor beta polypeptide, Becaplermin

#### **Background**

PDGF-BB is a member of the platelet-derived growth factor family. The four members of this family are mitogenic factors for cells of mesenchymal origin and are characterized by a motif of eight cysteines. This gene product can exist either as a homodimer (PDGF-BB) or as a heterodimer with the platelet-derived growth factor alpha polypeptide (PDGF-AB), where the dimers are connected by disulfide bonds. Mutations in this gene are associated with meningioma. Reciprocal translocations between chromosomes 22 and 7, at sites where this gene and that for COL1A1 are located, are associated with a particular type of skin tumor called dermatofibrosarcoma protuberans resulting from unregulated expression of growth factor. Two splice variants have been identified for this gene.

# Description

Platelet-Derived Growth Factor BB human recombinant produced in *E. coli* is a homodimeric, non-glycosylated, polypeptide chain containing 2x109 amino acids (218 amino acids in total) and having a molecular mass of 24. 3 kDa. PDGF-BB is purified by proprietary chromatographic techniques.

#### **Physical Appearance**

Sterile filtered white lyophilized (freeze-dried) powder.

#### **Formulation**

Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.

# Solubility

It is recommended to reconstitute the lyophilized PDGF-BB in sterile 18  $M\Omega$ -cm  $H_2O$  not less than 100  $\mu$ g/ml, which can then be further diluted to other aqueous solutions.

#### Stability

Lyophilized Platelet-derived Growth Factor BB, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution PDGF BB should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.

# Purity

Greater than 95.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

## **Amino Acid Sequence**

SLGSLTIAEP AMIAECKTRT EVFEISRRLI DRTNANFLVW PPCVEVQRCS GCCNNRNVQC RPTQVQLRPV QVRKIEIVRK KPIFKKATVT LEDHLACKCE TVAAARPVT

#### **Activity**

Determined by the dose-dependent stimulation of the proliferation of Balb/c 3T3 cells. The expected ED50 for this effect is 1.0 - 3.0 ng/ml.





# Usage

This product is offered by Biomol for research purposes only. Not for diagnostic purposes or human use. It may not be resold or used to manufacture commercial products without written approval of Biomol GmbH.