

# rHuPDGF-BB

rec. Human Platelet-derived Growth Factor BB from *E.coli*

Product	Cat#	Package size
rHuPDGF-BB - rec. Human Platelet-derived Growth Factor BB	C6037.0002	2µg
rHuPDGF-BB - rec. Human Platelet-derived Growth Factor BB	C6037.0002	10µg
rHuPDGF-BB - rec. Human Platelet-derived Growth Factor BB	C6037.1000	1mg

**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.

## Product description

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.

Recombinant Platelet-Derived Growth Factor BB is produced in *E.Coli* as a non-glycosylated homodimeric, polypeptide of 2x109 amino acids (218 amino acids in total) and a molecular mass of 24.3 kDa.

**Source:** *Escherichia coli*

## Biological 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.

**Purity:** Greater than 95% by SDS-PAGE and HPLC analysis.

## Amino acid sequence

SLGSLTIAEP AMIAECKTRT EVFEISRRLI DRTNANFLVW PPCVEVQRCS GCCNNRNVQC RPTQVQLRPV QVRKIEIVRK KPIFKKATVT LEDHLACKCE TVAAARPVT.

**Formulation:** Lyophilized from a 0.2µm filtered concentrated solution in PBS, pH7.4.

## Solubility / Reconstitution

It is recommended to briefly centrifuge the vial prior to opening to bring the contents to the bottom. Reconstitute the lyophilized Platelet-derived Growth Factor-BB in sterile water not less than 100µg/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 at -20°C. Reconstituted Platelet-derived Growth Factor-BB is best stored refrigerated at +2°C to +8°C between 2-7 days and at -20°C for long term storage. For long term storage it is recommended to add a carrier protein (e.g., 0.1% HSA or BSA).

**Please prevent from repeated freeze-thaw cycles.**

## Usage

This product is for research/laboratory usage only. It may not be used as drug, agricultural or pesticidal product, food additive or household chemical.