

# Recombinant Mouse Platelet-derived Growth Factor BB (rm PDGF-BB)

**Synonymes:** Glioma-derived growth factor (GDGF), Osteosarcoma-derived Growth Factor (ODGF)

**Introduction:** 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:** Recombinant mouse Platelet-Derived Growth Factor BB is a homodimeric, non-glycosylated, polypeptide chain containing 109 amino acids and having a molecular mass of 24.4 kDa. Rm PDGF-BB is purified by proprietary chromatographic techniques.

**Source:** *Escherichia Coli*.

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

**Formulation:** lyophilized from a 0.22 µm filtered solution in 25 mM Sodiumacetate, 100 mM NaCl, pH 4.0. The aliquots of 1 µg and 2 µg contain Trehalose 5% (w/vol) for better recovery

**Solubility:** It is recommended to reconstitute the lyophilized rm PDGF-BB in sterile H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

**Stability:** Lyophilized rm PDGF-BB although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rm PDGF-BB should be stored at 4° C between 2-7 days and for future use below -18° C. For long term storage it is recommended to add a carrier protein (0.1 % HSA or BSA). Please prevent freeze-thaw cycles.

**Purity:** Greater than 95.0% as determined by SDS-PAGE.

**Endotoxin:** The endotoxin level is less than 1 EU / µg determined by LAL method

**Amino Acid Sequence:** MSLGSLAAAE PAVIAECKTR TEVFQISRNL IDRTNANFLV WPPCVEVQRC  
SGCCNNRNVQ CRASQVQMRP VQVRKIEIVR KKPIFKKATV TLEDHLACKC ETIVTPRPVT

**Biological Activity:** Determined by its ability to stimulate proliferation of murine NIH 3T3 cells the ED<sub>50</sub> is < 2 ng/ml.

This material is offered for **research only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	2 µg	Cat.N°	12343672
<i>medium</i>	10 µg	Cat.N°	12343673
<i>large</i>	50 µg	Cat.N°	12343675
<i>x-large</i>	250 µg	Cat.N°	12343677
<i>xx-large</i>	1000 µg	Cat.N°	12343678

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