



## Recombinant Mouse PDGF-BB

20150227BB



**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no.:</b>	<b>M10-125</b>
Size:	10 µg
Lot. No.:	According to product label

### Scientific Background

<b>Gene-ID (NCBI):</b>	18591
<b>Synonyms:</b>	Platelet-derived growth factor-BB

PDGFs are disulfide-linked dimers consisting of two 12.0-13.5 kDa polypeptide chains, designated PDGF-A and PDGF-B chains. The three naturally occurring PDGFs; PDGF-AA, PDGF-BB and PDGF-AB, are potent mitogens for a variety of cell types including smooth muscle cells, connective tissue cells, bone and cartilage cells, and some blood cells. The PDGFs are stored in platelet  $\alpha$ -granules and are released upon platelet activation. The PDGFs are involved in a number of biological processes, including hyperplasia, chemotaxis, embryonic neuron development, and respiratory tubule epithelial cell development. Two distinct signaling receptors used by PDGFs have been identified and named PDGFR- $\alpha$  and PDGFR- $\beta$ . PDGFR- $\alpha$  is high-affinity receptor for each of the three PDGF forms. On the other hand, PDGFR- $\beta$  interacts with only PDGF-BB and PDGF-AB. Recombinant murine PDGF-BB is a 24.4 kDa disulfide-linked homodimer of two B chains (218 total amino acids).

### Sequence

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SLGSLAAAE PAVIAECKTR TEVFQISRNL IDRTNANFLV  
WPPCVEVQRC SGCCNNRNVQ CRASVQMRP VQVRKIEIVR  
KKPIFKKATV TLEDHLACKC ETIVTPRPVT
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### Database References

<b>Protein RefSeq:</b>	NP_035187.2
<b>Uniprot ID:</b>	P31240
<b>mRNA RefSeq:</b>	NM_011057.3

### Product Specifications

<b>Expressed in</b>	E. coli
<b>Purity</b>	> 98% by SDS-PAGE & HPLC analyses
<b>Structural Information</b>	disulphide-linked homodimer
<b>Endotoxin level</b>	< 0.1 ng /µg of protein (<1EU/µg).
<b>Formulation</b>	lyophilized
<b>Length (aa):</b>	218
<b>MW:</b>	24.4 kDa

**Biological Activity:** Determined by the dose-dependent stimulation of the proliferation of Balb/c 3T3 cells. The expected ED50 for this effect is 1.0-2.0 ng/ml.



**AVOID REPEATED FREEZE AND THAW CYCLES!**