

# **Mouse Platelet-Derived Growth Factor BB (PDGF-BB)**

# ORDERING INFORMATION

Catalog No: rAP-0042; Size: 2 µg; 10 µg

Storage: <- 20° C

# 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.

#### 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:

Platelet-Derived Growth Factor BB Mouse Recombinant is a homodimeric, non-glycosylated, polypeptide chain containing 109 amino acids and having a molecular mass of 24446 Dalton. PDGF-BB is purified by proprietary chromatographic techniques.

#### Source:

Escherichia Coli

# **Physical Appearance:**

Sterile Filtered White lyophilized (freeze-dried) powder.

# Formulation:

The protein was lyophilized without additives.

#### Solubility:

It is recommended to reconstitute the lyophilized Platelet-derived Growth Factor-BB in sterile 100mM acetic acid and 0.1% BSA 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 below -18°C. Upon reconstitution 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: (a) Analysis by RP-HPLC.

(b) Analysis by SDS-PAGE.

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# Amino acid sequence:

The sequence of the first five N-terminal amino acids was determined and was found to be Ser-Leu-Gly-Ser-Leu.

# **Biological Activity:**

The ED50, calculated by the dose-dependant proliferation of murine BALB/c 3T3 indicator cells (measured by <sup>3</sup>H-thymidine uptake) is < 2 ng/ml.

#### **Protein content:**

Protein quantitation was carried out by two independent methods:

- 1. UV spectroscopy at 280 nm using the absorbency value of 0.48 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics).
- 2. Analysis by RP-HPLC, using a standard solution of PDGF-BB as a Reference Standard

# Usage:

Angio-Proteomie's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.