

Platelet Derived Growth Factor-BB, mouse recombinant (rmPDGF-BB)

Catalog No: 94968
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 mouse recombinant produced in *E. coli*, is a homodimeric, non-glycosylated, polypeptide chain containing 2x109 amino acids (218 amino acids in total) and having a total molecular weight of 24.6 kDa. PDGF-BB is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

The protein was lyophilized from 10 mM sodium citrate pH 3.0.

Solubility

It is recommended to reconstitute the lyophilized PDGF-BB in sterile 100 mM acetic acid and 0.1% BSA not less than 100 μ 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. 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 98.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

Amino Acid Sequence

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

Activity

The biological activity is determined by the dose-dependant stimulation of the proliferation of human umbelical vein endothelial cells (HUVEC) using a concentration range of less than 1.6 ng/ml.





Usage

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