

Product Datasheet

Product Name Recombinant Human Platelet-Derived Growth Factor BB

Cata No CB500403

Source Escherichia 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.

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.

Platelet-Derived Growth Factor BB Human Recombinant is a homodimeric, non-glycosylated, polypeptide chain containing 109 amino acids and having a molecular mass of 24.3 kDa. PDGF-BB is purified by proprietary chromatographic techniques.

Purity

Greater than 95.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

Biological Activity

The ED $_{50}$, calculated by the dose-dependant proliferation of BALB/c 3T3 indicator cells (measured by 3H-thymidine uptake) is < 1 ng/ml, corresponding to a Specific Activity of 1 x 10 6 IU/mg.

Formulation

The protein was lyophilized without additives.

Storage

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. Please prevent freeze-thaw cycles.