

Human Platelet-Derived Growth Factor AB (PDGF-AB)

ORDERING INFORMATION

Catalog No: rAP-0038; Size: 2 µg; 10 µg Storage: <- 20° C

Synonyms:

Glioma-derived growth factor, GDGF, Osteosarcoma-derived Growth Factor, ODGF, PDGF-AB.

Introduction:

The term 'PDGF' refers to a family of disulphide bond-linked dimeric isoforms that act as autocrine and paracrine growth factors and are produced by a variety of cell types other than platelets. They act as potent mitogens for almost all mesenchymally-derived cells. Aberrant expression is involved in certain cancers, fibroproliferative disorders and atherosclerosis. The protein also contributes to wound healing and neural regeneration. There are four members of the PDGF family – PDGF A, PDGF B, PDGF C and PDGF D. Two distinct types of PDGF-A exist – a short form that is soluble and a long form that is retained by the extracellular matrix.

Description:

Platelet-Derived Growth Factor AB Human Recombinant is a heterodimeric, non-glycosylated, polypeptide chain containing 234 amino acids consisting of 13.3kDa alpha-chain and 12.2 beta-chain having a total molecular mass of 25.5kDa.

PDGF-AB is purified by proprietary chromatographic techniques.

Source:

Escherichia Coli.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

The protein was lyophilized with no additives.

Solubility:

It is recommended to reconstitute the lyophilized Platelet-derived Growth Factor-AB in sterile $18M\Omega$ -cm H2O not less than $100\mu g/ml$, which can then be further diluted to other aqueous solutions.

Stability:

Lyophilized Platelet-derived Growth Factor AB although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution PDGF-AB 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 97.0% 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-Ile-Glu-Glu-alpha chain and Met-Ser-Leu-Gly-Ser-beta chain.

Biological Activity:

The ED50, calculated by the dose-dependant proliferation of murine BALB/c 3T3 indicator cells (measured by ³H-thymidine uptake) is < 1 ng/ml, corresponding to a Specific Activity of 1 MIU/mg.

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.