

PDGF AB Human

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.

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

Source: Escherichia Coli.

Physical Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

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.

Purity: Greater than 98.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

Formulation:

Lyophilized from 10mM Acetic Acid.

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.

Usage:

NeoBiolab'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.

Solubility:

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

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.

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 1,000,000 units/mg.

Catalog #:CYP5-349

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