

32-1658: PDGF AB Recombinant Protein

Alternative Name : Glioma-derived growth factor, GDGF, Osteosarcoma-derived Growth Factor, ODFG, PDGF-AB.

Description

Source : Escherichia Coli. 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. 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.

Product Info

Amount :	10 µg
Purification :	Greater than 98.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.
Content :	Lyophilized from 10mM Acetic Acid.
Storage condition :	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.
Amino Acid :	Alpha chain: MSIEEAVPAV CKTRTVIYEI PRSQVDPTSA NFLIWPPCVE VKRCTGCCNT SSVKCQPSRV HHRSVKVAKV EYVRKKPKLK EVQVRLEEHL ECACATTS LN PDYREEDTGR PRES GKRRKR KRLKPT. Beta chain: SLGSLTIAEP AMIAECKTRT EVFEISRRLI DRTNANFLVW PPCVEVQRCS GCCNNRNVQC RPTQVQLRPV QVRKIGIVRK KPIFKKATVT LGDHLACKCE TVAAARPVT.

Application Note

It is recommended to reconstitute the lyophilized Platelet-derived Growth Factor-AB in sterile 18MΩ-cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions. The ED₅₀ as determined by the dose-dependent proliferation of mouse 3T3 indicator cells, is 1.4-2.1 ng/ml. This corresponds to a specific activity of 7.1x 10⁵ units/mg.