

BACKGROUND

Platelet-Derived Growth Factor (PDGF) is a mitogenic peptide growth hormone carried in the alpha-granules of platelets and is released when platelets adhere to traumatized tissues. Connective tissue cells near the traumatized region respond by initiating the process of replication. The synthesis of PDGF can be induced by IL-1, IL-6, TNF- α , TGF- β and EGF.

Recombinant human PDGF-AB is a non-glycosylated, disulfide-linked heterodimer. It consists of one 13.3 kDa alpha-chain and one 12.2 kDa beta-chain, with total molecular mass of 25.5 kDa.

Alternative Names:

GDGF, ODGF

Amino Acid Sequence:

Alpha chain MSIEEAVPAV CKTRTVIYEI PRSQVDPTSA
NFLIWPPCVE VKRCTGCCNT SSVKCQPSRV HHRSVKVAKV
EYVRKKPKLK EVQVRLEEHL ECACATTSLN PDYREEDTGR
PRESGKKRKR KRLKPT

Beta chain MSLGSLTIAE PAMIAECKTR TEVFEISRRL
IDRTNANFLV WPPCVEVQRC SGCCNNRNQV CRPTQVQLRP
VQVRKIGIVR KKPIFKKATV TLGDHLACKC ETVAARPVT

TECHNICAL INFORMATION

Source: *E.coli*

Physical Appearance:

Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:

Recombinant human PDGF-AB is lyophilized from 10 mM Acetic Acid.

Stability:

Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm
- RP-HPLC calibrated against a known standard
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Biological Activity:

The activity is calculated by the dose-dependent proliferation of mouse 3T3 indicator cells and is typically less than 1 ng/mL.

Products are for research use only. They are not intended for human, animal, or diagnostic applications.

