



User Manual

Platelet-derived growth factor -BB (PDGF-BB) (Human)

Cat. No. HEGFP-16012

Description:

Platelet-derived growth factor (PDGF) present in serum but absent from plasma was first discovered in animal study by Lynch and co-workers in the late 1980s. It is a disulfide-linked dimer consisting of two peptide-chains A and chain B. PDGF has three subforms: PDGF-AA, PDGF-BB, PDGF-AB. It is involved in a number of biological processes, including hyperplasia, embryonic neuron development, chemotaxis, and respiratory tubule epithelial cell development. The function of PDGF is mediated by two receptors (PDGFR- α and PDGFR- β).

Source:

Escherichia coli

Unit:

10 μ g

Reconstitution:

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at $< -20^{\circ}\text{C}$. Further dilutions should be made in appropriate buffered solutions.

Formulation:

Lyophilized from a 0.2 μ m filtered concentrated solution in PBS, pH 7.4.

Storage:

This lyophilized preparation is stable at 2-8 $^{\circ}\text{C}$, but should be kept at -20 $^{\circ}\text{C}$ for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 $^{\circ}\text{C}$. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 $^{\circ}\text{C}$ to -70 $^{\circ}\text{C}$. Avoid repeated freeze/thaw cycles.

Molecular Weight:

Approximately 12.3 kDa, a disulfide-linked homodimeric protein containing two 110 amino acid residues polypeptide (B chain).

Endotoxin:

Less than 1 EU/μg of PDGF-BB as determined by LAL method.

Usage:

This material is offered by Cyagen Biosciences for research, laboratory or further evaluation purposes. FOR RESEARCH USE ONLY. NOT INTENDED FOR ANY ANIMAL OR HUMAN THERAP EUTIC OR DIAGNOSTIC USE.

Biological Activity:

The ED50 determined by a cell proliferation assay using murine Balb/c 3T3 cells is less than 3 ng/mL, corresponding to a specific activity of $> 3.3 \times 10^5$ IU/mg.

Physical Appearance:

Sterile filtered white lyophilized (freeze-dried) powder.

AA Sequence:

MSLGSLTIAE PAMIAECKTR TEVFEISRRL IDRTNANFLV WPPCVEVQRC
SGCCNNRNVQ CRPTQVQLRP VQVRKIEIVR KKPIFKKATV TLEDHLACKC
ETVAAARPVT

Purity:

> 97% by SDS-PAGE and HPLC analyses.

Material Safety Data Sheets (MSDSs) are available upon request.

The Certificate of Analysis (COA), which provides detailed quality control information for each product, is also available at the Cyagen website.

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