

PDGF A Human

Platelet-Derived Growth Factor A Human Recombinant
GRF0300

Product Overview

Name PDGF A Human

Description

Platelet-Derived Growth Factor A Human Recombinant

Accession (Primary) [P04085](#)

Synonyms

Glioma-derived growth factor, GDGF, Osteosarcoma-derived Growth Factor, ODGF, PDGF-AA, PDGF-1.

Introduction

PDGF-AA, PDGF-BB and PDGF-AB, are potent mitogens for a variety of cell types including smooth muscle cells, connective tissue cells, bone and cartilage cells, and some blood cells. The PDGF is stored in platelet alpha-granules and released upon platelet activation. The PDGF is involved in a number of biological processes, including hyperplasia, chemotaxis, embryonic neuron development, and respiratory tubule epithelial cell development. Two distinct signaling receptors used by PDGF have been identified and named PDGFR-alpha and PDGFR-beta. PDGFR-alpha is high-affinity receptor for each of the three PDGF forms. On the other hand, PDGFR-beta interacts with only PDGF-BB and PDGF-AB.

Source

Escherichia Coli.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation

Lyophilized without any additives.

Stability

Lyophilized Platelet-Derived Growth Factor AA although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution PDGF-AA 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 95.0% as determined by SDS-PAGE.

Amino acid sequence

SIEEAVPAVC KTRTVIYEIP RSQVDPTSAN FLIWPPCVEV KRCTGCCNTS SVKCQPSRVH HRSVKVAKVE
YVRKKPKLKE VQVRLEEHL E CACATTSLNP DYREEDTGRP RESGKKRKRK RLKPT.

Biological Activity

The ED50, calculated by the dose-dependent proliferation of murine 3T3 indicator cells is < 0.32ng/ml, corresponding to a Specific Activity of 3,125x10³ units/mg.

Solubility

It is recommended to reconstitute the lyophilized Platelet-derived Growth Factor-AA in sterile 18M²-cm H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Precautions

PDGF A Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: ([P04085](#))