PDGF-AA Human E. coli

Product Data Sheet

Type: Recombinant
Source: E. coli
Species: Human
Other names: Platelet-Derived Growth Factor-AA, Glioma-derived growth factor (GDGF), Osteosarcoma-derived Growth Factor (ODGF)

Cat. No.:

RBG10265002	(2 µg)
RBG10265010	(10 µg)
RBG10265100	(100 µg)

Description

PDGFs are disulfide-linked dimers consisting of two 12.0-13.5 kDa polypeptide chains, designated PDGF-A and PDGF-B chains. The three naturally occurring PDGFs, 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 PDGFs are stored in platelet alpha-granules, and are released upon platelet activation. The PDGFs are 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 PDGFs have been identified and named PDGFR-alpha and PDGFR-beta. PDGFR-alpha is a high-affinity receptor for each of the three PDGF forms. On the other hand, PDGFR-beta interacts with only PDGF-BB and PDGF-AB. Recombinant Human PDGF-AA is a 28.5 kDa disulfide-linked homodimer of two A chains (250 total amino acids).

Research topic

Bone and cartilage metabolism, Cardiovascular disease, Coronary artery disease, Immune Response, Infection and Inflammation, Neural tissue markers, Oncology

Amino Acid Sequence

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SIEEAVPAVC KTRTVIYEIP RSQVDPTSAN FLIWPPCVEV KRCTGCCNTS SVKCQPSRVH HRSVKVAKVE YVRKKPKLKE
VQVRLEEHLE CACATTSLNP DYREEDTGRP RESGKKRKRK RLKPT
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Source

E. coli

Purity

98%

Biological Activity

The ED_{50} as determined by the dose-dependent stimulation of thymidine uptake by Balb/c 3T3 cells is 1 ng/ml, corresponding to a specific activity of 1×10^6 units/mg.

Endotoxin

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

Reconstitution

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

Storage, Stability/Shelf Life

-20°C

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