

Analytical Data Sheet

Lot number	9065920 not for drug use
Item number	H-7640.0002
Product number	4031161.0002
Product	rec PDGF-AA (human)

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 α -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 signalling receptors used by PDGFs have been identified and named PDGFR- α and PDGFR- β . PDGFR- α is a high-affinity receptor for each of the three PDGF forms. On the other hand, PDGFR- β 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).

Sequence: SIEEAVPAVC KTRTVIYEIP RSQVDPTSAN FLIWPPECVEV KRCTGCCNTS SVKQCPSRVH
HRSVKVAKVE YVRKKPKLKE VQVRLEEHL E CACATTS LNP DYREEDTGRP RESGKKRKRK R LKPT

Source: E.coli

Purity: \geq 98% by SDS-PAGE gel and HPLC analyses.

Authenticity: Verified by N-terminal and Mass Spectrometry analyses (when applicable).

Endotoxin level: Endotoxin level is <0.1 ng / μ g of protein (<1 EU/ μ g).

Protein Content: Verified by UV Spectroscopy and/or SDS-PAGE gel.

Biological Activity: Determined by the dose-dependent stimulation of the proliferation of Balb/c 3T3 cells. The expected ED₅₀ for this effect is 1.0-3.0 ng/ml.

Formulation: Sterile filtered through a 0.2 micron filter. Lyophilized from 10mM Acetic Acid.

Reconstitution: Centrifuge vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. Store at 2°C to 8°C for 1 week.

Storage/Stability: The lyophilized protein can be stored at -20°C to -80°C until December 2020. Stored at 4°C for 6 months. Stored at room temperature for 1 month. Reconstituted form at 2°C to 8°C for 1 week.

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 for 12 months. Avoid repeated freeze-thaw cycles.

Usage: For Research Use Only. Not for human use.