

Certificate of Analysis (CoA)

Recombinant Human PDGF-AA
Animal-Free manufactured
Catalog# AF-100-13A

Lot# 0510AFC03

Source: *E.coli*
Expiration Date: December 2027

Manufacturing Site: Westlake Village, CA, USA

Synonyms: Platelet-Derived Growth Factor-AA, Glioma-Derived Growth Factor (GDGF), Osteosarcoma-Derived Growth Factor (ODGF)

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 signaling receptors used by PDGFs have been identified and named PDGFR- α and PDGFR- β . PDGFR- α is 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 α chains (250 total amino acids).

Sequence (monomer): SIEEAAPAVC KTRTVIYEIP RSQVDPTSAN FLIWPPCDEV KRCTGCCNTS SVKCQPSRVH HRSVKVAKVE YVRKKPKLKE VQVRLEEHLE CACATTSLNP DYREEDTGRP RESGKKRKRK RLKPT

Storage & Handling:
Handling: Centrifuge vial prior to opening. Do not vortex after reconstitution. Avoid repeated freeze-thaw cycles.

Reconstitution: Initially reconstitute in water to 0.1-1.0 mg/ml. Store at 2°C to 8°C for up to 1 week or prepare for extended storage.

Extended Storage: After initial reconstitution, further dilute in a buffer containing a carrier protein or stabilizer (e.g. 5% Trehalose). Store working aliquots at -20°C to -80°C.

Storage/Stability:	Product Form	Temperature	Storage Time
	Lyophilized	-20°C to -80°C	December 2027
	Lyophilized	4°C	6 months
	Lyophilized	Room Temperature	1 month
	Reconstituted	2°C to 8°C	1 week
	Extended Storage	-20°C to -80°C	12 months

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

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

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

Endotoxin: Endotoxin level is < 0.01 ng/ μ g of protein (< 0.1 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.

Usage: Not for human use.

Country of Origin: USA



Quality Assurance Representative