

## **Growth Factor Data Sheet**

GoldBio growth factors are manufactured for RESEARCH USE ONLY and cannot be sold for human consumption!

Platelet-derived growth factor (PDGF) is a glycoprotein present in serum but absent from plasma. PDGF has three subforms: PDGFAA, PDGFBB, and PDGF-AB. This form is a disulfide-linked homodimer consisting of two peptide chains A (PDGFAA). 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 tyrosine kinase receptors, PDGFR- $\alpha$  and PDGFR- $\beta$ . PDGFR- $\alpha$  is the receptor that binds PDGFAA.

Catalog Number Product Name	1550-14 PDGFAA (dimer), Rat Recombinant Rat Platelet-derived Growth Factor, Alpha Polypeptide (dimer) PDGFA PDGF1
Source	Escherichia coli
MW	~25.3 kDa (A disulfide-linked homodimeric protein containing two 111 amino acid residues polypeptide)
Sequence	MSIEEAIPAV CKTRTVIYEI PRSQVDPTSA NFLIWPPCVE VKRCTGCCNT SSVKCQPSRV HHRSVKVAKV EYVRKKPKLK EVQVRLEEHL ECACATSNLN PDHREEETDV R
Accession Number	P28576
Purity	>98% by SDS-PAGE and HPLC analyses
Biological Activity	Fully biologically active when compared to standard. The ED $_{50}$ as determined by a cell proliferation assay using murine Balb/c 3T3 cells is less than 5.0 ng/ml, corresponding to a specific activity of >2.0 × $10^5$ IU/mg.
Formulation	Sterile filtered white lyophilized powder. Purified and tested for use in cell culture.
Storage/Handling	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage. The reconstituted sample can be apportioned into working aliquots and stored at -80 °C for up to 6 months. Avoid repeated freeze/thaw cycles.
Reconstitution	The sample should be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a siliconized tube using PBS that contains a 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Reconstituted solutions are stable for up to one week at 2-8°C. Stock solutions should be aliquoted and stored at -80°C. Further dilutions should be made in appropriate buffered solutions containing BSA or serum.

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