

32-1653: PDGF AA Yeast Recombinant Protein

Alternative Name : Glioma-derived growth factor, GDGF, Osteosarcoma-derived Growth Factor, ODFG, PDGF-AA, PDGF-1.

Description

Source : Pichia Pastoris. PDGF-AA Human Recombinant produced in Yeast is a homodimeric, glycosylated, polypeptide chain containing 2 x 110 amino acids and having a total molecular mass of 34 kDa. PDGF-AA is purified by proprietary chromatographic techniques. 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.

Product Info

Amount :	10 µg
Purification :	Greater than 98.0% as determined by SDS-PAGE.
Content :	The protein was lyophilized with 20mM sodium phosphate buffer.
Storage condition :	Lyophilized PDGF-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.

Application Note

It is recommended to reconstitute the lyophilized PDGF-AA in sterile 18MΩ·cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions. The ED₅₀ was found to be 1ng/ml corresponding to a Specific Activity of 1,000,000IU/mg calculated by the ability to stimulate the proliferation of mouse 3T3 fibroblasts (PNAS 94, 10205, 1997. Biochemistry, 1996, 35, 12077).

