

32-1657: rPDGF AA Recombinant Protein

Alternative Name : Platelet-derived growth factor subunit A,PDGF subunit A,PDGF-1,Platelet-derived growth factor A chain,Platelet-derived growth factor alpha polypeptide,Pdgfa,Rpa1.

Description

Source : Escherichia Coli. Platelet-derived Growth Factor AA Human Recombinant is a disulfide-linked homodimer Consists of two A chains containing 111 amino acids each and having a total molecular mass of 25.3KDa. 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 97.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.
Content : PDGF-AA was lyophilized from a 0.2µm filtered concentrated solution in PBS, pH7.0.
Storage condition : Lyophilized Platelet-derived Growth Factor 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.
Amino Acid : MSIEEAIPAV CKTRTVIYEI PRSQVDPTSA NFLIWPPCVE VKRCTGCCNT SSVKQCPSRV HHRSVKVAKV EYVRKKPKLK EVQVRLEEHL ECACATSNLN PDHREEETDV R.

Application Note

It is recommended to reconstitute the lyophilized Platelet-derived Growth Factor-AA in Sterile 4mM HCl to a concentration of 0.1-1.0 mg/ml. Further dilutions should be made in appropriate buffered solutions. The ED50, 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 $\mu\text{Ci}/\mu\text{g}$ 105 IU/mg.

