

32-12274: Human Platelet Derived Growth Factor-AB

Gene : PDGFA
Gene ID : 5154
Uniprot ID : P04085/P01127
Alternative Name : Platelet-derived growth factor subunit A, Platelet-derived growth factor A chain, Platelet-derived growth factor alpha polypeptide, Platelet-derived growth factor alpha polypeptide

Description

Source: Genetically modified E.coli.

Predicted MW: Dimer, Alpha:14.4 kDa, Beta: 12.4 kDa, Total 26.8 kDa (Alpha: 126, Beta: 110, Total: 236 aa)

Platelet-derived growth factor (PDGF) is an important regulator of cell growth, proliferation, and angiogenesis. PDGF synthesis is induced by IL-1, IL-6, TNF-alpha, TGF-beta and EGF signaling. PDGF functions as a mitogenic growth hormone on cells of mesenchymal lineage, such as smooth muscle and glial cells. PDGF is also stored in the alpha-granules of platelets and is released upon adherence to traumatized tissues. PDGF is a dimeric glycoprotein formed by two A chains (AA), two B chains (BB), or as a heterodimer with an A and a B chain (AB). The PDGF dimer binds the cell surface receptor tyrosine kinases PDGFR-alpha and PDGFR-beta .

Product Info

Amount : 10 µg / 100 µg
Purification : Reducing and Non-Reducing SDS PAGE at >= 95%
Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 10 mM sodium phosphate, pH 7.5
Content : Sterile water at 0.1 mg/mL
Storage condition : Store at -20°C
Amino Acid : Alpha chain: MSIEEAVPAV CKTRTVIYEI PRSQVDPTSA NFLIWPPCVE VKRCTGCCNT SSVKCQPSRV
HHRSVKVAKV EYVRKKPKLK EVQVRLEEHL ECACATTS LN PDYREEDTGR PRESGKKRKR KRLKPT Beta
chain: MSLGSLTIAE PAMIAECKTR TEVFEISRRL IDRTNANFLV WPPCDEVQRC SGCCNNRNVQ
CRPTQVQLRP VQVRKIEIVR KKPIFKKATV TLEDHLACKC ETVAAARPVT

Application Note

Endotoxin: Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.

Biological Activity was determined by 3T3 cell proliferation at <=20 ng/mL; >= 5.0 x 10⁴ units/mg (typical ED50 is < 2 ng/mL). Centrifuge vial before opening, Suspend the product by gently pipetting the above recommended solution down the sides of the vial. DO NOT VORTEX. Allow several minutes for complete reconstitution. For prolonged storage, dilute to working aliquots in a 0.1% BSA solution, store at -80°C and avoid repeat freeze thaws. Upon reconstitution, a small amount of visible precipitate can be expected. A 10% overfill has been added to the total material vial to compensate for this loss.

