

Active Recombinant Human PDGFB (82-190aa)

Cat. No. PDGFB-035E Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant Human PDGFB (Ser82 Thr190) was expressed in E. coli and produced using nonanimal reagent in an animalfree laboratory.
Species	Human
Source	E.coli
Description	Plateletderived growth factor (PDGF) was discovered as a major mitogenic factor present in serum but absent from plasma. It was found to be secreted from the μgranules of platelets activated during the coagulation of blood to form serum. Subsequent studies have demonstrated that PDGF is not one molecule but three, each a dimeric combination of two distinct but structurally related peptide chains designated A and B. In general, PDGF isoforms are potent mitogens for connective tissue cells, including dermal fibroblasts, glial cells, arterial smooth muscle cells and some epithelial and endothelial cells. In addition to its activity as a mitogen, PDGF is chemotactic for fibroblasts, smooth muscle cells, neutrophils and mononuclear cells.
Nterminal Sequence Analysis	Ser82
Structure / Form	Disulfidelinked homodimer
Molecular Mass	12.4 kDa
Activity	Measured in a cell proliferation assay using NR6R3T3 mouse fibroblasts. The ED50

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

for this effect is typically 1.5 – 6 ng/mL.

Endotoxin Level	<1.0 EU per 1 µg of the protein by the LAL method.
Purity	>97%, by SDS-PAGE under reducing conditions and visualized by silver stain.
Formulation	Lyophilized from a 0.2 µm filtered solution in Acetonitrile and TFA. See Certificate of Analysis for details.
Reconstitution	Reconstitute at 100 µg/mL in sterile 4 mM HCl.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 1. 12 months from date of receipt, 20 to 70 °C as supplied. 2. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 3. 3 months, 20 to 70 °C under sterile conditions after reconstitution.
UnitProt ID	P01127

GENE INFORMATION

Gene Name	PDGFB platelet-derived growth factor beta polypeptide [Homo sapiens]
Official Symbol	PDGFB
Synonyms	PDGFB; platelet-derived growth factor beta polypeptide; SIS; SSV; PDGF2; c-sis; FLJ12858; platelet-derived growth factor subunit B; PDGF-2; becaplermin; PDGF, B chain; PDGF subunit B; proto-oncogene c-Sis; platelet-derived growth factor 2; platelet-derived growth factor B chain; platelet-derived growth factor, B chain

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Gene ID	5155
mRNA Refseq	NM_002608
Protein Refseq	NP_002599
MIM	190040
Chromosome Location	22q12.3-q13.1; 22q13.1
Pathway	Ceramide signaling pathway; Cytokine-cytokine receptor interaction; MAPK signaling pathway; Pathways in cancer; Platelet Activation; Regulation of actin cytoskeleton; Signaling by PDGF
Function	cell surface binding; collagen binding; growth factor activity; platelet-derived growth factor binding; platelet-derived growth factor receptor binding; protein binding; protein homodimerization activity; protein tyrosine kinase activity
PDB rendering based on 1pdg.	