Recombinant Mouse Pdgfa Protein

Cat. No. Pdgfa-048M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant mouse platelet-derived growth factor AA (rmPDGF-AA) Ser87-Arg196(Accession # NP_032834.1) was expressed in human 293 cells (HEK293).
Species	Mouse
Source	HEK293
ProteinLength	87-196 a.a.
Description	PDGFs are mitogenic during early developmental stages, driving the proliferation of undifferentiated mesenchyme and some progenitor populations. During later maturation stages, PDGF signalling has been implicated in tissue remodelling and cellular differentiation, and in inductive events involved in patterning and morphogenesis. In addition to driving mesenchymal proliferation, PDGFs have been shown to direct the migration, differentiation and function of a variety of specialised mesenchymal and migratory cell types, both during development and in the adult animal. Other growth factors in this family include vascular endothelial growth factors B and C (VEGF-B, VEGF-C) which are active in angiogenesis and endothelial cell growth, and placenta growth factor (PlGF) which is also active in angiogenesis. PDGF plays a role in embryonic development, cell proliferation, cell migration, and angiogenesis. PDGF is a required element in cellular division for fibroblast, a type of connective tissue cell. PDGF is also known to maintain proliferation of oligodendrocyte progenitor cells. Platelet-derived growth factor subunit A is also known as PDGFA, PDGF-A, PDGF1, is a member of the platelet-derived growth

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

	factor family. PDGFA can exist either as a homodimer (PDGF-AA) or as a heterodimer with the platelet-derived growth factor Bata polypeptide (PDGF-AB), where the dimers are connected by disulfide bonds.
Molecular Mass	rmPDGF-AA, with two amino acids (Gly-Pro) at the N- terminus is a homodimeric, glycosilated polypeptide chain containing 2×110 amino acids, and has a calculated MW of 2×12.7 kDa. DTT-reduced protein migrates as a 16.5 kDa polypeptide and the non-reduced cystine-linked homodimer migrates as a 28 kDa protein.
Endotoxin	Less than 1.0 EU per 1 g of the rmPDGF-AA by the LAL method.
Purity	>95% as determined by SDS-PAGE of 6 g reduced (+) and non-reduced (-) rmPDGF-AA. All lots are greater than 95% pure.
Notes	Research Use Only. Not for use in diagnostic or therapeutic procedures.
Storage	Store at -20 centigrade in lyophilized state after receipt. For long term storage, upon reconstitution rmPDGF-AA should be aliquot and store at -20 centigrade or -8 centigrade centigrade. Avoid repeated freeze-thaw cycles.
Storage Buffer	Bulk protein in a 0.22 m filtered solution of 50mM Tris 150mM NaCl pH 7.0 and delivered as liquid formulation or lyophilized powder. Normally 5-8% trehalose and mannitol are added as protectants before lyophilization.

GENE INFORMATION

Gene Name	Pdgfa platelet derived growth factor, alpha [Mus musculus (house mouse)]
Official Symbol	Pdgfa
Synonyms	Pdgfa platelet derived growth factor, alpha; PDGFA; PDGF-A; PDGF1; PDGF-1;

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

	platelet-derived growth factor subunit A; PDGF A-chain PDGF subunit A; platelet-derived growth factor A-chain; platelet-derived growth factor alpha polypeptide
Gene ID	18590
mRNA Refseq	NM_008808
Protein Refseq	NP_032834

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