

Active Recombinant Mouse Pdgfa

Cat. No. Pdgfa-304M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	PDGF-AA Mouse Recombinant is a disulfide linked homodimeric, non-glycosylated, polypeptide chain containing 2 x 126 amino acids and having a total molecular mass of 28.9 kDa. PDGF-AA is purified by proprietary chromatographic techniques.
Species	Mouse
Source	E.coli
Description	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.
Form	Sterile Filtered White lyophilized (freeze-dried) powder. The protein was lyophilized with no additives.
Bio-activity	Established by the dose-dependent stimulation of Balb/c 3T3 cells proliferation. The expected ED50 for this effect is 8-10 ng/ml corresponding to a specific activity of 100,000-125,000IU/mg.

 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

AA Sequence	MSIEEAVPAV CKTRTVIYEI PRSQVDPTSA NFLIWPPCVE VKRCTGCCNT SSVKCQPSRV HHRSVKVAKV EYVRKKPKLK EVQVRLEEHL ECACATSNLN PDHREEETGR RRESGKNRKR KRLKPT.
Purity	Greater than 97.0% as determined by RP-HPLC and SDS-PAGE.
Storage	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.
GENE INFORMATION	
Gene Name	Pdgfa platelet derived growth factor, alpha [Mus musculus (house mouse)]
Official Symbol	Pdgfa
Synonyms	Pdgfa; PDGF-1; platelet derived growth factor, alpha; platelet-derived growth factor subunit A; 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
UniProt ID	P20033
Chromosome	5 G2; 5 77.65 cM

 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

Location	
Pathway	Adaptive Immune System; Cytokine-cytokine receptor interaction; Cytokines and Inflammatory Response (BioCarta)
Function	growth factor activity; platelet-derived growth factor binding; platelet-derived growth factor receptor binding

 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