Active Recombinant Human PDGF-AB

Cat. No. PDGFA&PDGFB-17H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human PDGF-AB, expressed in E. Coli.
Species	Human
Source	E.coli
Description	The term 'PDGF' refers to a family of disulphide bond-linked dimeric isoforms that act as aut centigraderine and paracrine growth factors and are produced by a variety of cell types other than platelets.They act as potent mitogens for almost all mesenchymally-derived cells.Aberrant expression is involved in certain cancers, fibroproliferative disorders and atherosclerosis. The protein also contributes to wound healing and neural regeneration. There are four members of the PDGF family – PDGF A, PDGF B, PDGF C and PDGF D. Two distinct types of PDGF-A exist – a short form that is soluble and a long form that is retained by the extracellular matrix.
Predicted N Terminal	The sequence of the first five N-terminal amino acids was determined and was found to be Met-Ser-Ile-Glu-Glu-alpha chain and Met-Ser-Leu-Gly-Ser-beta chain.
Form	Lyophilized with no additives.
Bio-activity	The ED50, calculated by the dose-dependant proliferation of murine BALB/c 3T3 indicator cells (measured by 3H-thymidine uptake) is< 1="" ng/ml,="" corresponding="" to="" a="" specific="" activity="" of="" 1="">
Molecular Mass	Platelet-derived Growth Factor AB Human Recombinant is a heterodimeric, non-

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	glycosylated, polypeptide chain containing 234 amino acids consisting of 13.3kDa alpha-chain and 12.2 beta-chain having a total molecular mass of 25.5kDa. PDGF-AB is purified by proprietary chromatographic techniques.
Purity	Greater than 97.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Usage	FOR RESEARCH USE ONLY
Quality Control Test	Lyophilized Platelet-derived Growth Factor AA although stable at room temperature for 3 weeks, should be stored desiccated below -180C. Upon reconstitution PDGF-AA should be stored at 4 centigrade between 2-7 days and for future use below -18 centigrade. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).
Reconstitution	It is recommended to reconstitute the lyophilized Platelet-derived Growth Factor-AB in sterile 18M-cm H2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.
Warning	Avoid repeated freeze-thaw cycles.

GENE INFORMATION

Gene Name	PDGFA platelet-derived growth factor alpha polypeptide [Homo sapiens]; PDGFB platelet-derived growth factor beta polypeptide [Homo sapiens]
Official Symbol	PDGFA; PDGFB
Synonyms	PDGFA; platelet-derived growth factor alpha polypeptide; platelet-derived growth factor subunit A; PDGF A chain; PDGF A; PDGF1; platelet derived growth factor alpha chain; PDGF-1; PDGF A-chain; PDGF subunit A; platelet-derived growth factor

	A chain; platelet-derived growth factor alpha chain; platelet-derived growth factor alpha isoform 2 preproprotein; PDGF-A; PDGFB; platelet-derived growth factor beta polypeptide; platelet derived growth factor beta polypeptide (simian sarcoma viral (v sis) oncogene homolog), SIS; platelet-derived growth factor subunit B; becaplermin; oncogene SIS; SSV; PDGF-2; 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; Platelet-derived growth factor, beta polypeptide (oncogene SIS); platelet-derived growth factor beta polypeptide (simian sarcoma viral (v-sis) oncogene homolog); SIS; PDGF2; c-sis; FLJ12858;
Gene ID	5154; 5155
mRNA Refseq	NM_002607; NM_002608
Protein Refseq	NP_002598; NP_002599
MIM	173430; 190040
UniProt ID	P04085; P01127
Chromosome Location	7p22; 22q13.1
Pathway	Ceramide signaling pathway, organism-specific biosystem; Cytokine-cytokine receptor interaction, organism-specific biosystem; Cytokine-cytokine receptor interaction, conserved biosystem; Cytokines and Inflammatory Response, organism-specific biosystem; Downstream signal transduction, organism-specific biosystem; Focal Adhesion, organism-specific biosystem; Focal adhesion, organism-specific biosystem;
Function	cell surface binding; collagen binding; eukaryotic cell surface binding; growth factor

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	activity; platelet-derived growth factor binding; platelet-derived growth factor receptor binding; contributes_to platelet-derived growth factor receptor binding; platelet-derived growth factor receptor binding; protein heterodimerization activity; protein homodimerization activity; cell surface binding; collagen binding; eukaryotic cell surface binding; growth factor activity; platelet-derived growth factor binding; platelet-derived growth factor receptor binding; contributes_to platelet-derived growth factor receptor binding; platelet-derived growth factor receptor binding; platelet-derived growth factor receptor binding; protein binding; protein heterodimerization activity; protein homodimerization activity; protein tyrosine kinase activity; superoxide-generating NADPH oxidase activator activity;

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