

Bioactive

PDGFA/PDGFB (Human) Recombinant Protein

Catalog # P4800

Size 10 ug

Applications

Result of activity analysis

Result of activity analysis

Serial dilutions of human PDGF-AB, starting at 100 ng/mL, were added to 3T3 cells. Cell proliferation was measured after 46 hours and the linear portion of the curve was used to calculate the ED50.

Specification

Product Description	Human PDGFA/PDGFB (heterodimer) recombinant protein expressed in <i>Escherichia coli</i> .
Sequence	Alpha chain: MSIEEAVPAVCKTRTVIYEIPRSQVDPTSANFLWPPCVEVKRCTGCCNTSSVKCQP SRVHHRSVKVAKVEYVRKKPKLKEVQVRLEEHLACACATTSNPDYREEDTGRPRESGKKRKR KRLKPT Beta chain: MSLGSLTIAEPAMIAECKTRTEVFEISRRLIDRTNANFLWPPCVEVQRCSGCCNNRN VQCRPTQVQLRPVQVRKIEVRKKPIFKKATVTLEDHLACKCETVAAARPVT
Host	Escherichia coli
Theoretical MW (kDa)	13.3
Form	Lyophilized
Preparation Method	<i>Escherichia coli</i> expression system
Endotoxin Level	< 0.1 EU/ug
Activity	The activity is determined by the dose-dependent proliferation of mouse 3T3 indicator cells. The expected ED ₅₀ for this effect is 1.4-2.1 ng/mL.
Storage Buffer	Lyophilized from 10 mM acetic acid

Storage Instruction

Store at -20°C on dry atmosphere.
After reconstitution with sterilized water, store at -20°C.
Aliquot to avoid repeated freezing and thawing.

Note

Result of activity analysis
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Serial dilutions of human PDGF-AB, starting at 100 ng/mL, were added to 3T3 cells. Cell proliferation was measured after 46 hours and the linear portion of the curve was used to calculate the ED50.

Applications

- Functional Study
- SDS-PAGE

Gene Info — PDGFA

Entrez GeneID[5154](#)**Protein Accession#**[P04085 \(Gene ID : 5154\);P01127 \(Gene ID : 5155\)](#)**Gene Name**

PDGFA

Gene Alias

PDGF-A, PDGF1

Gene Description

platelet-derived growth factor alpha polypeptide

Omim ID[173430](#)**Gene Ontology**[Hyperlink](#)**Gene Summary**

The protein encoded by this gene is a member of the platelet-derived growth factor family. The four members of this family are mitogenic factors for cells of mesenchymal origin and are characterized by a motif of eight cysteines. This gene product can exist either as a homodimer or as a heterodimer with the platelet-derived growth factor beta polypeptide, where the dimers are connected by disulfide bonds. Studies using knockout mice have shown cellular defects in oligodendrocytes, alveolar smooth muscle cells, and Leydig cells in the testis; knockout mice die either as embryos or shortly after birth. Two splice variants have been identified for this gene. [provided by RefSeq]

Other Designations

PDGF A-chain|platelet-derived growth factor alpha|platelet-derived growth factor alpha chain|platelet-derived growth factor alpha isoform 2 preproprotein

Gene Info — PDGFB

Entrez GeneID	5155
Protein Accession#	P04085 (Gene ID : 5154);P01127 (Gene ID : 5155)
Gene Name	PDGFB
Gene Alias	FLJ12858, PDGF2, SIS, SSV, c-sis
Gene Description	platelet-derived growth factor beta polypeptide (simian sarcoma viral (v-sis) oncogene homolog)
Omim ID	190040
Gene Ontology	Hyperlink
Gene Summary	<p>The protein encoded by this gene is a member of the platelet-derived growth factor family. The four members of this family are mitogenic factors for cells of mesenchymal origin and are characterized by a motif of eight cysteines. This gene product can exist either as a homodimer (PDGF-BB) or as a heterodimer with the platelet-derived growth factor alpha polypeptide (PDGF-AB), where the dimers are connected by disulfide bonds. Mutations in this gene are associated with meningioma. Reciprocal translocations between chromosomes 22 and 7, at sites where this gene and that for COL1A1 are located, are associated with a particular type of skin tumor called dermatofibrosarcoma protuberans resulting from unregulated expression of growth factor. Two alternatively spliced transcript variants encoding different isoforms have been identified for this gene. [provided by RefSeq]</p>
Other Designations	PDGF, B chain Platelet-derived growth factor, beta polypeptide (oncogene SIS) becaplermin oncogene SIS platelet-derived growth factor 2 platelet-derived growth factor beta platelet-derived growth factor, B chain v-sis platelet-derived growth factor beta p

Pathway

- [Cytokine-cytokine receptor interaction](#)
- [Cytokine-cytokine receptor interaction](#)
- [Focal adhesion](#)
- [Focal adhesion](#)
- [Gap junction](#)
- [Gap junction](#)
- [Glioma](#)
- [Glioma](#)

- [MAPK signaling pathway](#)
- [MAPK signaling pathway](#)
- [Melanoma](#)
- [Melanoma](#)
- [Pathways in cancer](#)
- [Pathways in cancer](#)
- [Prostate cancer](#)
- [Prostate cancer](#)
- [Regulation of actin cytoskeleton](#)
- [Regulation of actin cytoskeleton](#)
- [Renal cell carcinoma](#)

Disease

- [Amyotrophic lateral sclerosis](#)
- [Anoxia](#)
- [Asthma](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Chorioamnionitis](#)
- [Coronary Artery Disease](#)
- [Coronary Artery Disease](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Edema](#)
- [Fetal Membranes](#)
- [Genetic Predisposition to Disease](#)

- [Genetic Predisposition to Disease](#)
- [Glomerulonephritis](#)
- [Head and Neck Neoplasms](#)
- [Neoplasms](#)
- [Obstetric Labor](#)
- [Ovarian Neoplasms](#)
- [Pre-Eclampsia](#)
- [Premature Birth](#)
- [Recurrence](#)