

Bioactive

PDGFA/PDGFB (Human) Recombinant Protein

Catalog # P8129

Size 2 x 10 ug

Specification

Product Description Human PDGFA/PDGFB (P01127/P04085) recombinant protein expressed in *Escherichia coli*.

Sequence PDGFA:MSIEEAVPAVCKTRTVIYEIPRSQVDPTSANFLWPPCVEVKRCTGCCNTSSVKCQPSRV
HHRSVKVAKVEYVRKKPKLKEVQVRLEEHLACACATSLNPDYREEDTGRPRESGKKRKRRLK
PT.
_x005F_x005F_x005F_x000D__x005F_x000D_ PDGFB: SLGSLTIAEPAMIAECKTRTEVFEISRR
LIDRTNANFLVWPPCVEVQRCSGCCNNRNVQCRPTQVQLRPVQVRKIGMRKKPIFKKATVTLGD
HLACKCETVAAARPVT.

Host Escherichia coli

Theoretical MW (kDa) 26.4

Form Lyophilized

Preparation Method *Escherichia coli* expression system

Purity > 95% by SDS-PAGE

Activity The ED₅₀ as determined by the dose-dependent proliferation of mouse 3T3 indicator cells, is 1.4-2.1 ng/mL. This corresponds to a specific activity of 7.1x 10⁵ units/mg.

Storage Buffer Lyophilized from 10mM AcOH

Storage Instruction Lyophilized although stable at room temperature for 3 weeks, should be stored desiccated below -20 °C. Upon reconstitution should be stored at 4°C between 2-7 days and for future use below -20°C. Aliquot to avoid repeated freezing and thawing._x005F_x005F_x005F_x000D__x005F_x000D_ For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Applications

- Functional Study
- SDS-PAGE

Gene Info — PDGFA

Entrez GeneID	5154
Protein Accession#	P01127 P04085
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#	P01127 P04085
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

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]

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](#)