

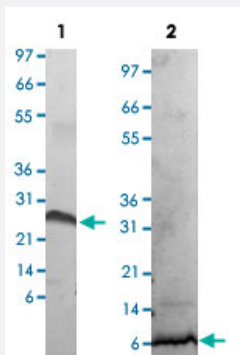
Bioactive

PDGFB (Human) Recombinant Protein

Catalog # P4572

Size 10 ug

Applications



Lane 1: non-reducing conditions

Lane 2: reducing conditions

Result of activity analysis

Result of activity analysis

Serial dilutions of human PDGFB, 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 PDGFB (P01127) recombinant protein expressed in <i>Escherichia coli</i> .
Sequence	MSLGSLTIAEPAMAECKTRTEVFEISRRLIDRTNANFLVWPPCVEVQRCSGCCNNRNVQCRPTQ VQLRPVQVRKIEVRKKPIFKKATVTLEDHLACKCETVAAARPVT
Host	<i>Escherichia coli</i>
Theoretical MW (kDa)	24.3
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 3T3 indicator cells. The expected E _{D50} for this effect is 1.5-2.2 ng/mL.
Quality Control Testing	1 ug/lane in 4-20% Tris-Glycine gel Stained with Coomassie Blue Lane 1: non-reducing conditions Lane 2: reducing conditions
Storage Buffer	Lyophilized with 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 Result of activity analysis Serial dilutions of human PDGFB, 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 — PDGFB

Entrez GeneID	5155
Protein Accession#	P01127
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](#)
- [Focal adhesion](#)
- [Gap junction](#)
- [Glioma](#)
- [MAPK signaling pathway](#)
- [Melanoma](#)
- [Pathways in cancer](#)
- [Prostate cancer](#)
- [Regulation of actin cytoskeleton](#)
- [Renal cell carcinoma](#)

Disease

- [Amyotrophic lateral sclerosis](#)
- [Anoxia](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)

- [Chorioamnionitis](#)
- [Coronary Artery Disease](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Edema](#)
- [Fetal Membranes](#)
- [Genetic Predisposition to Disease](#)
- [Glomerulonephritis](#)
- [Head and Neck Neoplasms](#)
- [Neoplasms](#)
- [Obstetric Labor](#)
- [Ovarian Neoplasms](#)
- [Pre-Eclampsia](#)
- [Premature Birth](#)
- [Recurrence](#)