

Recombinant Human PDGFB Protein

Cat. No. PDGFB-33H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human PDGF-BB protein without tag was expressed in E. coli. Animal-free (AOF) and carrier protein-free. Mass spectrometry: single species with expected mass. Analytical reversed-phase: single sharp peak. Recovery from stock vial: >95%
Species	Human
Source	E.coli
Description	This gene encodes a member of the protein family comprised of both platelet-derived growth factors (PDGF) and vascular endothelial growth factors (VEGF). The encoded preproprotein is proteolytically processed to generate platelet-derived growth factor subunit B, which can homodimerize, or alternatively, heterodimerize with the related platelet-derived growth factor subunit A. These proteins bind and activate PDGF receptor tyrosine kinases, which play a role in a wide range of developmental processes. Mutations in this gene are associated with meningioma. Reciprocal translocations between chromosomes 22 and 17, at sites where this gene and that for collagen type 1, alpha 1 are located, are associated with dermatofibrosarcoma protuberans, a rare skin tumor. Alternative splicing results in multiple transcript variants.
Molecular Mass	25 kDa

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Endotoxin	<0.005 EU/µg protein (below level of detection)
Applications	Differentiation of human pluripotent Stem cell (hPSC)-derived neural progenitor cells into oligodendrocyte precursor cells
Storage	Resuspend in water at >100 µg/mL, prepare single use aliquots, add carrier protein if desired and store frozen at -20 or -80 centigrade
Storage Buffer	Lyophilized from acetonitrile, TFA

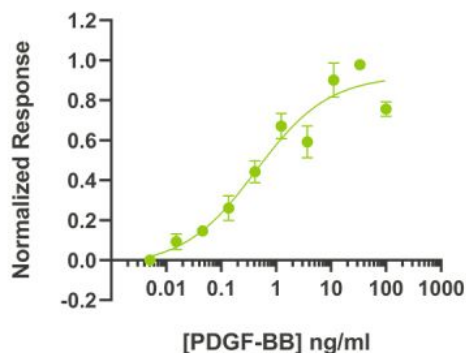
GENE INFORMATION

Gene Name	PDGFB platelet derived growth factor subunit B [Homo sapiens (human)]
Official Symbol	PDGFB
Synonyms	PDGFB; platelet derived growth factor subunit B; SIS; SSV; IBGC5; PDGF2; c-sis; PDGF-2; platelet-derived growth factor subunit B; PDGF subunit B; PDGF, B chain; becaplermin; epididymis secretory sperm binding protein; platelet-derived growth factor 2; platelet-derived growth factor B chain; platelet-derived growth factor beta polypeptide (simian sarcoma viral (v-sis) oncogene homolog); platelet-derived growth factor, beta polypeptide (oncogene SIS); proto-oncogene c-Sis
Gene ID	5155
mRNA Refseq	NM_002608
Protein Refseq	NP_002599
MIM	190040

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UniProt ID
P01127
Bioactivity


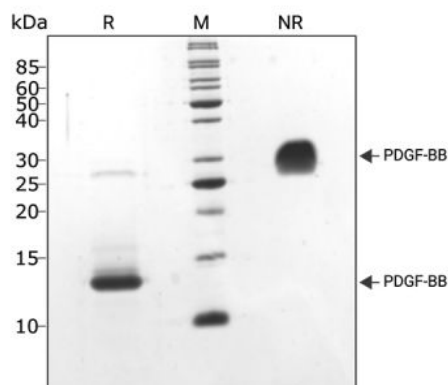
PDGF-BB activity is determined by the proliferation of Balb/c 3T3 cells. Cells are treated in triplicate with a serial dilution of PDGF-BB for 3 days. Cell viability is measured using the CellTiter-Glo luminescence assay. EC₅₀ = 0.42 ng/mL (0.017 pM).

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Purity



PDGF-BB migrates as a single band at ~30 kDa in non-reducing conditions and 13 kDa upon reduction (R). No contaminating protein bands are visible. Purified recombinant protein was resolved using 15% w/v SDS-PAGE in reduced and non-reduced conditions and stained with Coomassie Brilliant Blue R250.