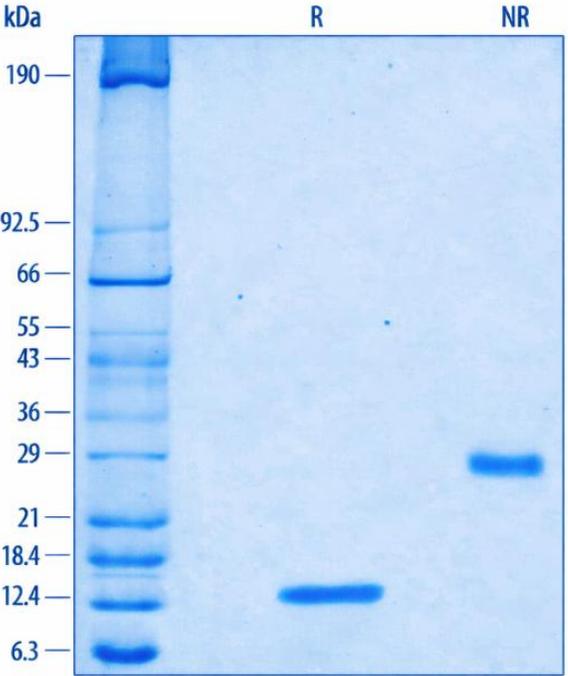


Product Data Sheet

Human Recombinant Platelet Derived Growth Factor BB (PDGF-BB) Protein

Catalog Number: ORF.GF.PDGFBB

Product Details	
Product Name	Human Recombinant Platelet Derived Growth Factor BB (PDGF-BB) Protein
Catalog Numbers	ORF.GF.PDGFBB-10, ORF.GF.PDGFBB-50, ORF.GF.PDGFBB-100, ORF.GF.PDGFBB-500, ORF.GF.PDGFBB-1000
Sizes	10 µg, 50 µg, 100 µg, 500 µg, 1000 µg
Species	Human
UniProt ID	P01127
Product Form	Lyophilized

Product Description	Product Image
<p>Platelet-Derived Growth Factor-BB (PDGF-BB) is a biologically active homodimeric isoform of the PDGF family, playing a critical role in cell proliferation, migration, and tissue repair. It functions by binding to PDGF receptors (PDGFR-α and PDGFR-β), triggering receptor dimerization and activation of downstream signaling pathways such as MAPK, PI3K/AKT, and JAK/STAT. These pathways regulate the behavior of mesenchymal cells, smooth muscle cells, fibroblasts, and pericytes, contributing to processes like angiogenesis, wound healing, and tissue remodeling.</p> <p>PDGF-BB is highly expressed during embryogenesis and in response to tissue damage, where it supports vascular stabilization, extracellular matrix formation, and recruitment of supportive cells to nascent blood vessels. In adult tissues, it continues to influence repair and fibrosis pathways. Recombinant PDGF-BB is widely used in vitro to promote proliferation and migration of mesenchymal and vascular cells, stimulate tissue regeneration, and model fibrotic and oncogenic signaling. It is a powerful tool in regenerative medicine, cancer biology, and biomaterial-based therapeutic development.</p>	

For research applications only. Not for diagnostic or therapeutic use.



Product Specifications		
Protein Description	109-amino acid mature PDGF-BB protein consisting of residues Ser82 to Thr190	
Expression System	Available Upon Request	
Amino Acid Sequence	SLGSLTIAEP AMIAECKTRT EVFEISRRLI DRTNANFLVW PPCVEVQRCS GCCNNRNVQC RPTQVQLRPV QVRKIEIVRK KPIFKKATVT LEDHLACKCE TVAAARPVT	
Molecular Weight	SDS-PAGE	12.3 kDa
Purity	SDS-PAGE	> 95%
Endotoxin	LAL	< 0.10 EU/microgram
Bioactivity	Determined by its ability to stimulate the proliferation of BALB/c 3T3 cells.	Biologically Active

Product Preparation	
Shipping Temperature	Ambient
Form	Lyophilized
Reconstitution Instructions	Reconstitute with sterile deionized water or 4 mM HCl.

Storage and Stability		
	Temperature	Storage Time
Lyophilized Form	-20°C to -80°C	12 months
Reconstituted Form	2°C to 8°C	1 month
Reconstituted Form	-20°C to -80°C	3 months

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