Recombinant PDGFB protein (His tag)

Catalog Number	546637
Synonyms	PDGF subunit B; PDGF-2; Platelet-derived growth factor B chain; Platelet-derived growth factor beta polypeptide; Proto-oncogene c-Sis; Becaplermin
Species	Human
Expression System	E. coli
Accession	P01127
Molecular Weight	Predictes a molecular mass of 12.97 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 13 kDa band.

Product Information

Sequence Region	87-185
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 87-185 aa (P01127) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Introducing the recombinant PDGF subunit B (PDGF-2) fragment (residues 87-185), a highly stable and soluble protein unit derived from human Platelet-derived Growth Factor B. This fragment is engineered for structural and biochemical studies, offering researchers a reliable tool to investigate the mechanisms of cell proliferation, migration, and wound healing processes. Platelet-derived Growth Factor Subunit B (PDGFB) is a critical growth factor in human biology, essential for embryonic development, cell proliferation, migration, survival, and chemotaxis. It acts as a potent mitogen for mesenchymal cells and is vital for the proliferation and recruitment of pericytes and vascular smooth muscle cells in organs such as the central nervous system, skin, lung, heart, and placenta. PDGFB plays a key role in blood vessel development, kidney glomeruli formation, and wound healing, with its signaling modulated through heterodimer formation with PDGFA. The protein is secreted and released by platelets upon wounding, highlighting its importance in tissue repair and regeneration. This recombinant fragment (87-185) was selected based on structural predictions to ensure stability and solubility, facilitating detailed mechanistic studies.