Recombinant PGFRB protein (His tag)

Catalog Number	542077
Synonyms	PDGF-R-beta; PDGFR-beta; Beta platelet-derived growth factor receptor; Beta-type platelet-derived growth factor receptor; CD140 antigen-like family member B; Platelet-derived growth factor receptor 1; PDGFR-1; CD antigen CD140b
Species	Human
Expression System	E. coli
Accession	P09619
Molecular Weight	Predictes a molecular mass of 57.96 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 62 kDa band.

Product Information

Sequence Region	33-532
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 33-532 aa (P09619) 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	Recombinant Human PDGF-R-beta Fragment (residues 33-532) is a high-purity protein encompassing the five extracellular Ig-like C2-type domains of the platelet-derived growth factor receptor beta. This fragment serves as an essential tool for investigating ligand binding, receptor activation mechanisms, and domain-specific functions in cell signaling and vascular biology research. Platelet-derived growth factor receptor beta (PDGF-R-beta) is a crucial tyrosine kinase receptor that regulates embryonic development, cell proliferation, survival, differentiation, chemotaxis, and migration. It plays a fundamental role in blood vessel development by promoting pericyte and smooth muscle cell recruitment to endothelial cells, and is essential for normal cardiovascular system development and kidney glomeruli formation. The receptor activates multiple signaling pathways including PLCG1, PIK3R1/AKT1, and MAPK cascades upon binding PDGF ligands. Located at the cell membrane as a single-pass type I membrane protein, the activated receptor undergoes ubiquitination and internalization leading to lysosomal degradation. The extracellular domain fragment (residues 33-532) contains the complete Ig-like domain architecture responsible for ligand recognition and receptor dimerization.