

Rat PDGF R beta/CD140b Protein

Cat. No. PGF-RM1RB

Description

Source	Recombinant Rat PDGF R beta/CD140b Protein is expressed from HEK293 with His tag at the C-terminus. It contains Leu32-Val531.
Accession	Q05030
Molecular Weight	The protein has a predicted MW of 57.36 kDa. Due to glycosylation, the protein migrates to 80-110 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

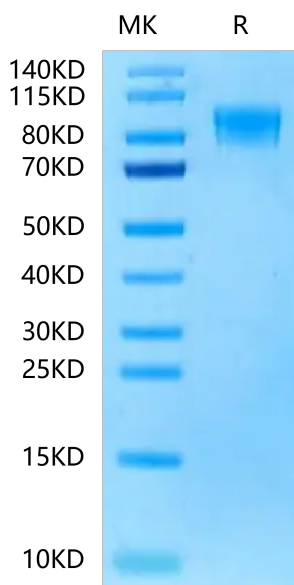
Formulation	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

PDGF is a major serum mitogen that can exist as a homo or hetero-dimeric protein consisting of disulfide-linked PDGF-A and PDGF-B chains. The PDGF-AA, PDGF-BB and PDGF-AB isoforms have been shown to bind to two distinct cell surface PDGF receptors with different affinities. Where as PDGF R alpha binds all three PDGF isoforms with high affinity, PDGF R beta binds PDGF-BB only with high-affinity. PDGF R plays an essential role in blood vessel development by promoting proliferation, migration and recruitment of pericytes and smooth muscle cells to endothelial cells. Plays a role in the migration of vascular smooth muscle cells and the formation of neointima at vascular injury sites.

Assay Data

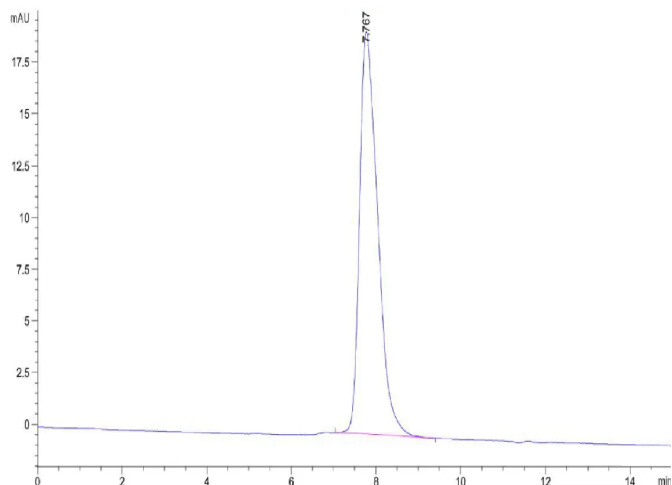
Bis-Tris PAGE



Rat PDGF R beta on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

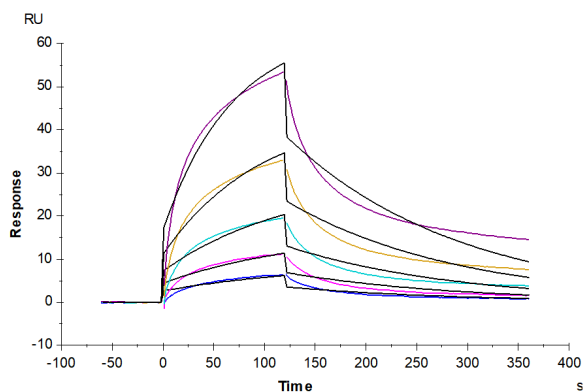
SEC-HPLC

Assay Data



The purity of Rat PDGF R beta is greater than 95% as determined by SEC-HPLC.

SPR Data



Human PDGFB, His Tag immobilized on CM5 Chip can bind Rat PDGF R beta, His Tag with an affinity constant of 67.56 nM as determined in SPR assay (Biacore T200).