

# Canine PDGF R beta/CD140b Protein

Cat. No. PGF-DM1RB

## Description

<b>Source</b>	Recombinant Canine PDGF R beta/CD140b Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Gly32-Val532.
<b>Accession</b>	Q6QNF3
<b>Molecular Weight</b>	The protein has a predicted MW of 57.25 kDa. Due to glycosylation, the protein migrates to 70-100 kDa based on Tris-Bis PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

## Formulation and Storage

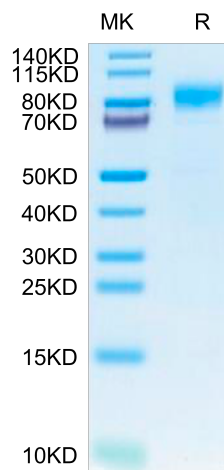
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days 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

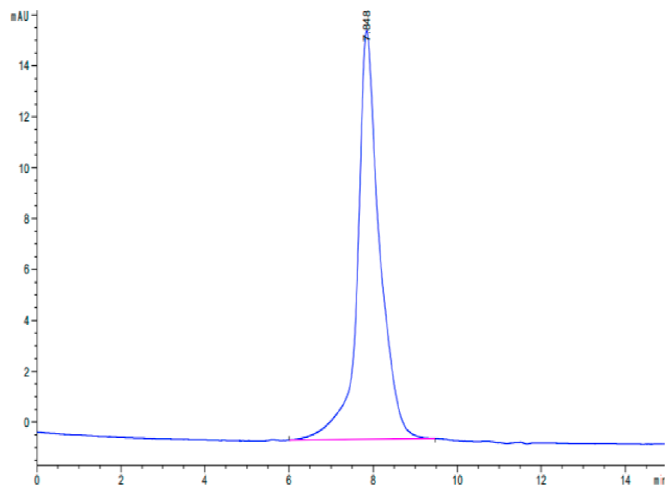
### Tris-Bis PAGE



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

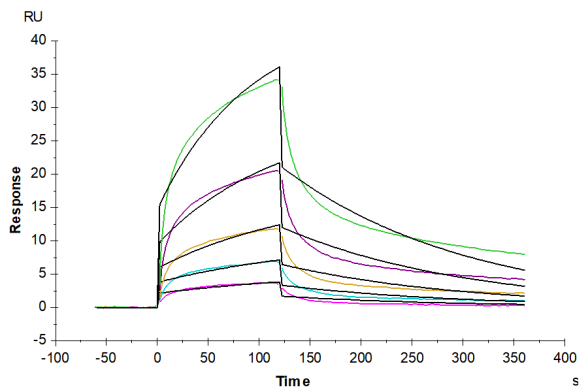
### SEC-HPLC

Assay Data



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

SPR Data



Human PDGFB, His Tag immobilized on CM5 Chip can bind Canine PDGF R beta, His Tag with an affinity constant of 0.203  $\mu\text{M}$  as determined in SPR assay (Biacore T200).