

# Human PDGF-C Protein (His Tag)



Sino Biological  
Biological Solution Specialist

Catalog Number: 10273-H07Y

## General Information

### Gene Name Synonym:

FALLOTEIN; SCDGF

### Protein Construction:

A DNA sequence encoding the human PDGFC (NP\_057289.1) (Val235-Gly345) was expressed with a polyhistidine tag at the N-terminus.

**Source:** Human

**Expression Host:** Yeast

## QC Testing

**Purity:** > 97 % as determined by SDS-PAGE.

### Endotoxin:

Please contact us for more information.

### Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

**Predicted N terminal:** His

### Molecular Mass:

The recombinant human PDGFC consists of 126 amino acids and predicts a molecular mass of 14.4 kDa.

### Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

### Storage:

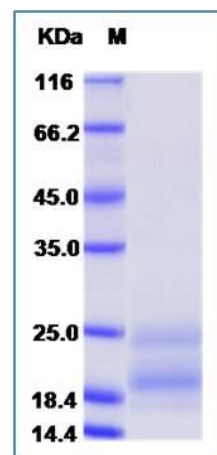
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

PDGF-C is a member of the PDGF/VEGF family of growth factors with a unique domain organization and expression pattern. Platelet-derived growth factor receptors (PDGFRs) are catalytic receptors that have intracellular tyrosine kinase activity. They have roles in the regulation of many biological processes including embryonic development, angiogenesis, cell proliferation and differentiation, and contribute to the pathophysiology of some diseases, including cancer. There are two isoforms of the PDGFR receptor; PDGFRalpha and PDGFRbeta, which can form homo- or heterodimers. The endogenous PDGFR ligands are PDGF-A, -B, -C and -D, which induce receptor dimerization and transphosphorylation at specific tyrosine residues upon binding. This activates the intracellular kinase activity, initiating intracellular signaling through the MAPK, PI 3-K and PKCgamma pathways. PDGF-C acts as a specific ligand for alpha platelet-derived growth factor receptor homodimer, and alpha and beta heterodimer. Binding of this growth factor to its affinity receptor elicits a variety of cellular responses. PDGF-C Appears to be involved in the three stages of wound healing: inflammation, proliferation and remodeling. Involved in fibrotic processes, in which transformation of interstitial fibroblasts into myofibroblasts plus collagen deposition occurs.

## References

- 1.Li X, *et al.* (2000) PDGF-C is a new protease-activated ligand for the PDGF alpha-receptor. *Nat Cell Biol.* 2 (5): 302-9.
- 2.Ding H, *et al.* (2004) A specific requirement for PDGF-C in palate formation and PDGFR-alpha signaling. *Nat Genet.* 36 (10): 1111-6.
- 3.Choi SJ, *et al.* (2009) The PDGF-C regulatory region SNP rs28999109 decreases promoter transcriptional activity and is associated with CL/P. *European Journal of Human Genetics.* 17 (11): 774-84.

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