

Human PDGF-C Protein (Fc Tag)

Catalog Number: 10273-H01H



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

FALLOTEIN, SCDGF

Protein Construction:

A DNA sequence encoding the mature form of human PDGF-C (NP_057289.1) (Val 235-Gly 345) was expressed with the fused Fc region of human IgG1 at the N-terminus.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 97 % as determined by SDS-PAGE

Bio-Activity

Measured in a cell proliferation assay using Balb/3T3 mouse embryonic fibroblast cells.

The ED50 for this effect is typically 0.5-3 µg/mL.

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

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

Predicted N terminal: Glu 20

Molecular Mass:

The recombinant human PDGFC/Fc is a disulfide-linked homodimeric protein. The reduced monomer consists of 348 amino acids and predicts a molecular mass of 39 kDa. As a result of glycosylation, rh PDGFC/Fc monomer is approximately 45 kDa in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile 100mM Glycine, 10mM NaCl, 50mM Tris, pH 7.5

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

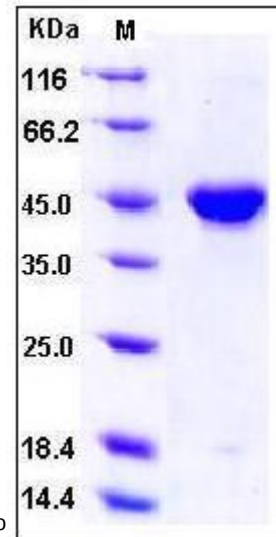
Usage Guide

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.

SDS-PAGE:



Reconstitution:

Detailed reconstitution

th the products.

Protein Description

The Platelet-derived growth factor C (PDGF-C) is one of the four member of the PDGF family of growth factors which are known mitogens and survival factors for cells of mesenchymal origin. They form four disulfide-linked homodimers (PDGF-AA, -BB, -CC, and -DD) and one heterodimer (PDGF-AB). PDGF-C has a unique two-domain structure consisting of an N-terminal CUB and a conserved C-terminal growth factor domain that are separated by a hinge region. PDGF-CC only binds to PDGF Rα with high affinity, activates the homodimerization of PDGF Rαβ, and induces the signal pathways, such as profibrotic pathways in hepatic fibrosis. PDGF-CC is involved in a variety of processes including angiogenesis, morphogenesis and cardiovascular development, as well as the tumorigenesis. Meanwhile, recent studies have shown that the serine protease tissue plasminogen activator (tPA) used for treatment of acute stroke mediates the activation PDGF-CC, which suggests potential new strategies for cardiovascular and stroke treatment.

References

1. Li, X. et al., 2000, Nat. Cell Biol. 2: 302-309.
2. Gilbertson, D.G. et al., 2001, J. Biol. Chem. 276: 27406-27414.
3. Campbell, J.S. et al., 2005, Proc. Natl. Acad. Sci. U.S.A. 102: 3389-3394.
4. Su, E.J. et al., 2008, Nat. Med. 14: 731-737.
5. Zwerner, J.P. and W.A. May. 2001, Oncogene, 20: 626-633.

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