Mouse VEGF-D / VEGFD / FIGF Protein (Fc Tag)

Catalog Number: **50157-M01H**

Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

RP23-202H24.2, AI325264, VEGF-D, Vegfd

Protein Construction:

A DNA sequence encoding the mature form of mouse FIGF (P97946) (Phe 98-Ser 206) was fused with the Fc region of human IgG1 at the N-terminus.

Source: Mouse

Expression Host: Human Cells

QC Testing

Purity: > (65.7+30.1) % as determined by SDS-PAGE

Bio-Activity

1. Measured by its binding ability in a functional ELISA.
2. Immobilized human VEGFR3-His (Cat:10806-H08H) at 10 μg/mL (100 μl/well) can bind mouse Fc-VEGFD, The EC50 of mouse Fc-VEGFD is 49 ng/mL.
3. Immobilized mouse VEGFR3-His?(Cat:50584-M08H) at 10 μg/mL (100 μl/well) can bind mouse Fc-VEGFD, The EC50 of mouse Fc-VEGFD is 44 ng/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 ℃

Predicted N terminal: Glu

Molecular Mass:

The recombinant mouse FIGF/Fc is a disulfide-linked homodimer. The reduced monomer comprises 369 amino acids and has a calculated molecular mass of 40.6 kDa.The apparent molecular mass of the protein is approximately 45 and 36 kDa in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

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.

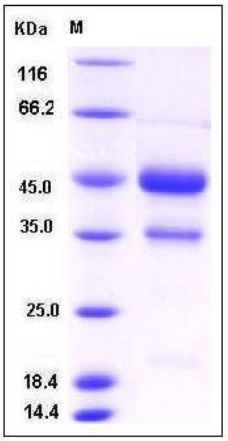
Usage Guide

Storage:

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

Avoid repeated freeze-thaw cycles.

SDS-PAGE:



Reconstitution:

Detailed reconstitution instructions are sent along with the products.

Protein Description

Vascular endothelial growth factor D (VEGF-D), also known as C-fos induced growth factor (FIGF), is a vascular endothelial growth factor. This secreted protein is a member of the platelet derived growth factor/vascular endothelial growth factor (PDGF/VEGF) family and performs activities in angiogenesis, lymphangiogenesis, and endothelial cell growth. Human VEGF-D is expressed in adult lung, heart, muscle, and small intestine, and is most abundantly expressed in fetal lungs and skin. It is structurally and functionally similar to VEGF-C, and is secreted as a non-covelent homodimer in a antiparallel fashion. VEGF-D undergoes a complex proteolytic maturation, generating multiple processed forms which bind and activate VEGFR-2 and VEGFR-3 receptors. Like VEGFC, it may particularly be involed in the formation of the venous and lymphatic vascular systems during embryogenesis, and also in the maintenance of differentiated lymphatic endothelium in adults.

References

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2. Stacker SA. et al., 1999, J Biol Chem. 274: 32127-36.
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4. McColl BK. et al., 2003, J Exp Med. 198: 863-8.
5. Roy H. et al., 2006, FEBS Lett. 580: 2879-87.
6. Otrock ZH. et al., 2007, Blood Cells Mol Dis. 38: 258-68.