

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

Catalog Number: 50157-M01H



Sino Biological  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

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:** HEK293 Cells

## QC Testing

**Purity:** > 95 % 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 EC<sub>50</sub> 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 EC<sub>50</sub> of mouse Fc-VEGFD is 44 ng/mL.

### Endotoxin:

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

**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, 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

### Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

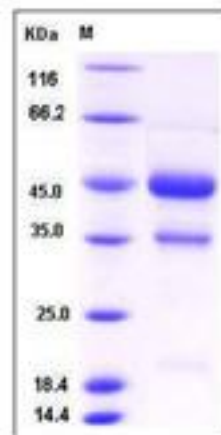
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

Vascular endothelial growth factor D (VEGF-D), also known as C-fos induced growth factor (FIGF), belongs to the platelet-derived growth factor/vascular endothelial growth factor (PDGF/VEGF) family. FIGF protein is active in angiogenesis, lymphangiogenesis, and endothelial cell growth. FIGF protein is secreted as a non-covalent homodimer in an antiparallel fashion. Human FIGF protein is expressed in adult lung, heart, muscle, and small intestine, and is most abundantly expressed in fetal lungs and skin. FIGF protein is structurally and functionally similar to VEGF-C. Therefore, FIGF protein binds and activates VEGFR-2 (Flk1) and VEGFR-3 (Flt4) receptors, and may particularly be involved in cancers, such as breast cancer, epithelial ovarian carcinoma and so on.

## References

1. Avantiato V, et al. (1998) Embryonic expression pattern of the murine figf gene, a growth factor belonging to platelet-derived growth factor/vascular endothelial growth factor family. Mech Dev. 73(2):221-4.
2. Rocchigiani M, et al. (1998) Human FIGF: cloning, gene structure, and mapping to chromosome Xp22.1 between the PIGA and the GRPR genes. Genomics 47(2):207-16.
3. Karpanen T, et al. (2008) VEGF-D: a modifier of embryonic lymphangiogenesis. Blood. 112(5): 1547-8.

**For Research Use Only. Not for use in diagnostic or therapeutic procedures.**

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