

# Human VEGF-D / VEGFD / FIGF Protein (His Tag)

Catalog Number: 10557-H08H



**Sino Biological Inc.**

Biological Solution Specialist

## General Information

### Gene Name Synonym:

FIGF, VEGF-D, VEGFD

### Protein Construction:

A DNA sequence encoding the mature form of human VEGFD (NP\_004460.1) corresponding to amino acid (Phe 93-Ser 201) was expressed with a C-terminal polyhistidine tag.

**Source:** Human

**Expression Host:** Human Cells

## QC Testing

**Purity:** > 95 % as determined by SDS-PAGE and SEC-HPLC Analysis.

### 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:** Phe 93

### Molecular Mass:

The recombinant mature form of human VEGFD consists of 120 amino acids and has a predicted molecular mass of 13.6 kDa. In SDS-PAGE under reducing conditions, it migrates with an apparent molecular mass of 20-22 kDa due to glycosylation.

### 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.

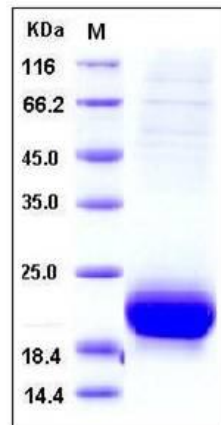
## Usage Guide

### Storage:

Store it under sterile conditions at -20°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 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-covalent homodimer in an 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 involved 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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4. McColl, B.K. et al., 2003, J. Exp. Med. 198: 863-868.
5. Roy, H. et al., 2006, FEBS Lett. 580: 2879-2887.
6. Otrrock, Z.H. et al., 2007, Blood Cells Mol. Dis. 38: 258-268.

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