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

Catalog Number: **80104-R01H**

General Information

Gene Name Synonym:

FIGF

Protein Construction:

A DNA sequence encoding the rat FIGF (Phe94-Arg210) was expressed, fused with the Fc region of human IgG1 at the N-terminus.

Source: Rat

Expression Host: HEK293 Cells

QC Testing

Purity: > 85 % as determined by SDS-PAGE

Bio Activity:

Measured by its binding ability in a functional ELISA. Immobilized recombinant Rat VEGF-Dprotein (Cat:80104-R01H) at 10 μg/mL (100 μl/well) can bind biotinylated mouse VEGFR3-Fc (Cat:50584-M02H) with a linear range of 31.25-2000 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 Rat FIGF/Fc comprises 377 amino acids and has a predicted molecular mass of 41.6 kDa. The apparent molecular mass of the protein is approximately 52 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

Storage:

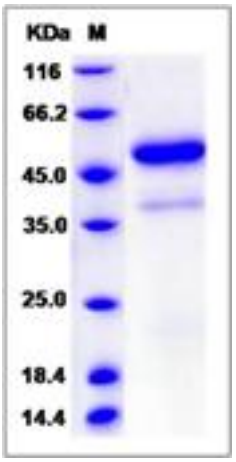
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

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-covelent 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.Avantaggiato 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.