Mouse VEGFR3 / FLT-4 Protein (Fc Tag)

Catalog Number: **50584-M02H**

Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

FLT-4; FLT-41; FLT41; LMPH1A; PCL; VEGFR-3; VEGFR3; AI323512; Chy; Flt-4; VEGFR-3; VEGFR3

Protein Construction:

A DNA sequence encoding the mouse FLT4 (P35917-1) extracellular domain (Met 1-Glu 775) was was fused with the Fc region of human IgG1 at the C-terminus.

Source: Mouse

Expression Host: Human Cells

QC Testing

Purity: > 92 % as determined by SDS-PAGE

Bio Activity:

1. Measured by its ability to bind human VEGF-D (Cat: 10557-H08H) in functional ELISA. 2. Immobilized human VEGF-C (Cat: 10542-H08H) at 10 μg/mL (100 μL/well) can bind mouse VEGFR3-Fc. The EC_{50} of mouse VEGFR3-Fc is 0.008 μg/mL. 3. Measured by its ability to bind with mouse FIGF-His (Cat:50157-M08H) in a functional ELISA.

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: Tyr 25

Molecular Mass:

The secreted recombinant mouse FLT4/Fc chimera is a disulfide-linked homodimer. The reduced monomer consists of 992 amino acids and has a predicted molecular mass of 112 kDa. As a result of glycosylation and proteolytic cleavage, rm FLT4/Fc monomer migrates as three bands (150, 85, 65 kDa) corresponding to the full length and the cleaved two polypeptides respectively 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:

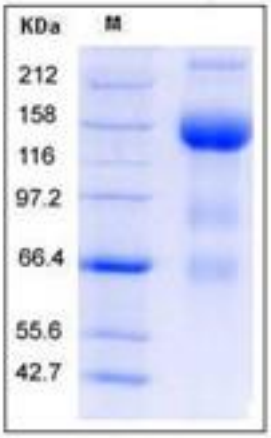
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Vascular endothelial growth factor receptor 3 (VEGFR3), also known as FLT-4, together with the other two members VEGFR1 (FLT-1) and VEGFR2 (KDR/Flk-1) are receptors for vascular endothelial growth factors (VEGF) and belong to the class III subfamily of receptor tyrosine kinases (RTKs). The VEGFR3 protein is expressed mainly on lymphatic vessels but it is also up-regulated in tumor angiogenesis. Mutations in VEGFR3 have been identified in patients with primary lymphoedema. The VEGF-C/VEGF-D/VEGFR3 signaling pathway may provide a target for antilymphangiogenic therapy in prostate cancer, breast cancer, gastric cancer, lung cancer, non-small cell lung cancer (NSCLC), and so on.

References

1.Shushanov S, *et al.* (2000)VEGFc and VEGFR3 expression in human thyroid pathologies. Int J Cancer.86(1): 47-52.
2.Iljin K, *et al.* (2001) VEGFR3 gene structure, regulatory region, and sequence polymorphisms. FASEB J. 15(6): 1028-36.
3.Liu XE, *et al.* (2004) Expression and significance of VEGF-C and FLT-4 in gastric cancer. World J Gastroenterol. 10(3): 352-5.