Human VEGFR3 / FLT4 Protein (His Tag)

Catalog Number: 10806-H08H

Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

FLT-4; FLT-41; FLT41; LMPH1A; PCL; VEGF Receptor 3; VEGFR-3; VEGFR3

Protein Construction:

A DNA sequence encoding the extracellular domain (Met 1-Ile 776) of human VEGFR3 (NP_002011.2) was expressed with a C-terminal polyhistidine tag.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 97 % as determined by SDS-PAGE

Bio Activity:

1. Measured by its binding ability in a functional ELISA. 2. Immobilized human VEGF-C (Cat: 10542-H08H) at 10 μg/mL (100 μl/well) can bind human VEGFR3-his. The EC_{50} of human VEGFR3-his is 0.011 μg/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: Tyr 25 & Ser 473

Molecular Mass:

The recombinant human VEGF R3 consists of 763 amino acids and predicts a molecular mass of 86 kDa. As a result of glycosylation, rhVEGFR3 migrates as an approximately 130 kDa in non-reduced SDS-PAGE.

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:

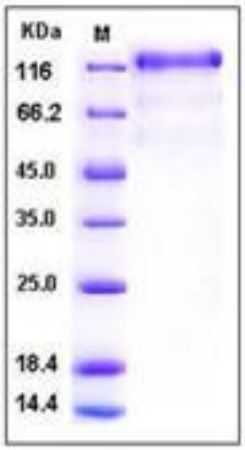
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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.