

Synonym

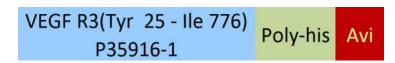
Flt-4,FLT4,LMPH1A,PCLFLT41,VEGFR3,VEGFR-3,FLT-4,FLT-41,FLT41,PCL

Source

Biotinylated Human VEGF R3, His, Avitag(FL4-H82E1) is expressed from human 293 cells (HEK293). It contains AA Tyr 25 - Ile 776 (Accession # P35916-1).

Predicted N-terminus: Tyr 25

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (AvitagTM).

The protein has a calculated MW of 88.2 kDa. The protein migrates as 115-120 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using AvitagTM technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from $0.22~\mu m$ filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

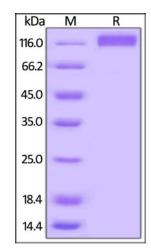
For long term storage, the product should be stored at lyophilized state at -20 $^{\circ}$ C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

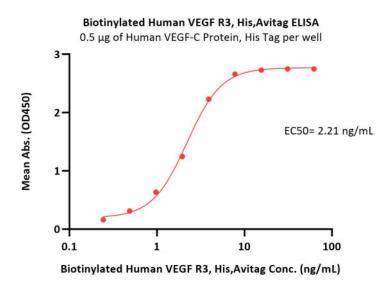


Biotinylated Human VEGF R3, His, Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA

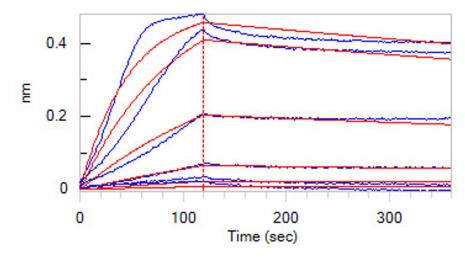






Immobilized Human VEGF-C Protein, His Tag (Cat. No. VEC-H52H3) at 5 μ g/mL (100 μ L/well) can bind Biotinylated Human VEGF R3, His,Avitag (Cat. No. FL4-H82E1) with a linear range of 0.2-4 ng/mL (QC tested).

Bioactivity-BLI



Loaded Biotinylated Human VEGF R3, His, Avitag (Cat. No. FL4-H82E1) on SA Biosensor, can bind Human VEGF-D, His Tag (Cat. No. VED-H5228) with an affinity constant of 110 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

Vascular endothelial growth factor receptor 3 (VEGF R3), 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). VEGF R3 mediates lymphangiogenesis in response to VEGF-C and VEGF-D. VEGF R3 is widely expressed in the early embryo but becomes restricted to lymphatic endothelia at later stages of development. It is likely that VEGF R3 may be important for lymph angiogenesis.

Clinical and Translational Updates

