

Biotinylated Cynomolgus VEGF R2 / KDR Protein, His,Avitag™ (MALS verified)

Catalog # VE2-C82E3



Synonyms

KDR, CD309, FLK1, VEGFR, VEGFR2

Source

Biotinylated Cynomolgus VEGF R2 Protein, His,Avitag (VE2-C82E3) is expressed from human 293 cells (HEK293). It contains AA Ala 20 - Gln 758 (Accession # [EHH53800.1](#)).

Predicted N-terminus: Ala 20

Molecular Characterization



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

The protein has a calculated MW of 86.4 kDa. The protein migrates as 130-180 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

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

Protein Ratio

Passed as determined by the SABA assay / HABA assay / binding ELISA.

Purity

>90% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 µm 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.

Shipping and Storage

This product is shipped at ambient temperature.

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

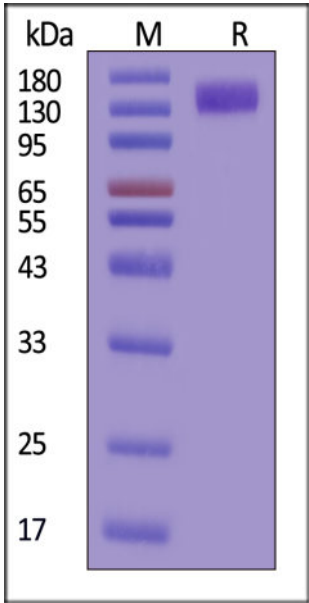
This product is stable after storage at:

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

ACRO Quality Management System

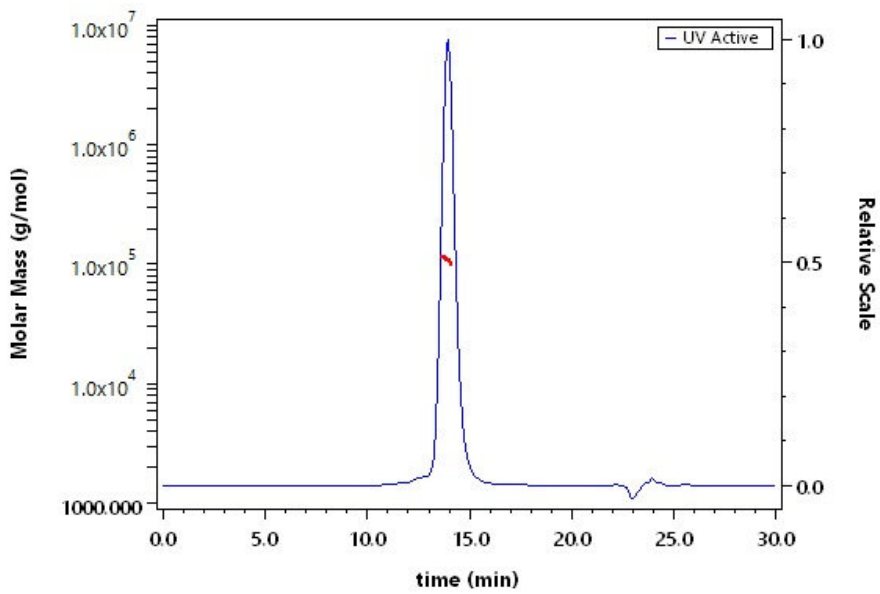
- [QMS\(ISO, GMP\)](#)
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



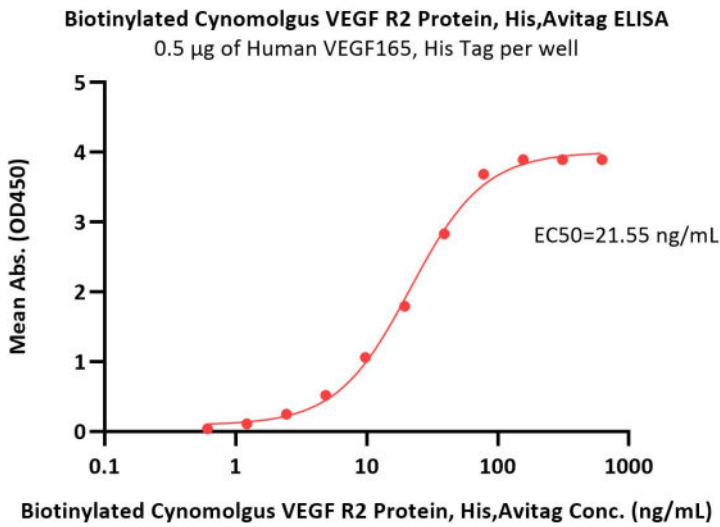
Biotinylated Cynomolgus VEGF R2 Protein, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS



The purity of Biotinylated Cynomolgus VEGF R2 Protein, His,Avitag (Cat. No. VE2-C82E3) is more than 95% and the molecular weight of this protein is around 90-130 kDa verified by SEC-MALS.

Activity-ELISA



Immobilized Human VEGF165, His Tag (Cat. No. VE5-H5248) at 5 µg/mL (100 µL/well) can bind Biotinylated Cynomolgus VEGF R2 Protein, His,Avitag (Cat. No. VE2-C82E3) with a linear range of 0.6-39 ng/mL (QC tested).

Background

Kinase insert domain receptor (KDR), also known as CD309, FLK1 and VEGFR-2, is one of the subtypes of the VEGF receptor family. VEGF receptors bind vascular endothelial growth factor (VEGF). There are three main subtypes, numbered 1, 2 and 3. They each contain an extracellular region with 7 immunoglobulin-like domains, a single transmembrane helix, and an intracellular split tyrosine kinase domain. VEGF-A binds to VEGFR-1 (Flt-1) and VEGFR-2 (KDR/Flk-1). VEGFR-2 mediates nearly all known cellular responses to VEGF. VEGFR-1 is less well defined but is thought to modulate VEGFR-2 signaling; it may also act as a decoy receptor that sequesters VEGF, a role particularly important during embryonic vasculogenesis. Additionally, VEGFR-2 can directly interact with extracellular HIV-1 Tat protein, and this interaction appears to enhance angiogenesis in Kaposi's sarcoma lesions.



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