

# Biotinylated Human VEGF R2/KDR Protein, Ultra Low Endotoxin



Cat. No. VGF-HM4R2B-UL

## Description

<b>Source</b>	Recombinant Biotinylated Human VEGF R2/KDR Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Ala20-Glu764.
<b>Accession</b>	P35968-1
<b>Molecular Weight</b>	The protein has a predicted MW of 86.2 kDa. Due to glycosylation, the protein migrates to 120-160 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 0.01 EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

The vascular endothelial growth factor receptor-2 (VEGFR-2/KDR/flk-1) functions as the primary mediator of vascular endothelial growth factor activation in endothelial cells. Regulation of VEGFR-2 expression appears critical in mitogenesis, differentiation, and angiogenesis. Transcriptional regulation of the VEGFR-2 is complex and may involve multiple putative upstream regulatory elements including E boxes.

## Assay Data

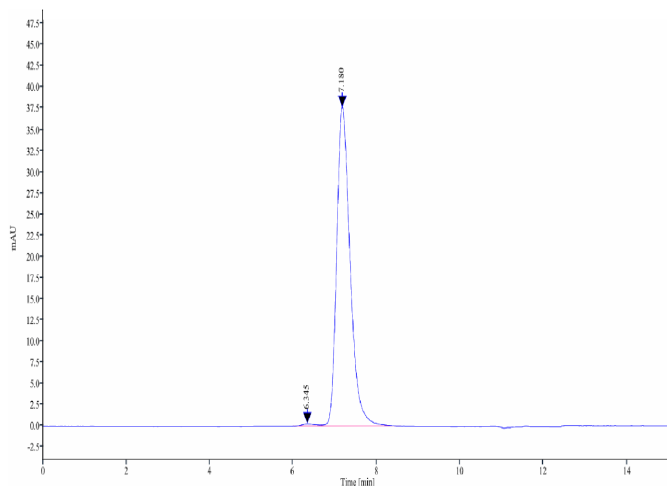
### Bis-Tris PAGE



Biotinylated Human VEGF R2 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

Assay Data

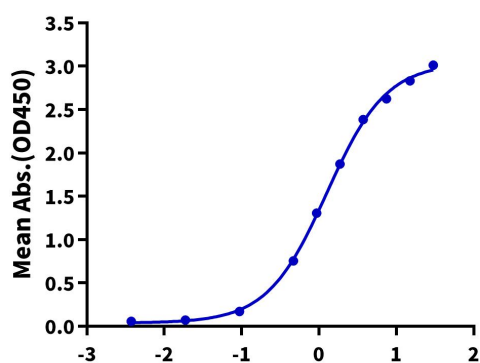


The purity of Biotinylated Human VEGF R2 is greater than 95% as determined by SEC-HPLC.

ELISA Data

**Biotinylated Human VEGF R2, His-Avi Tag ELISA**

0.5µg Human VEGF165, No Tag Per Well

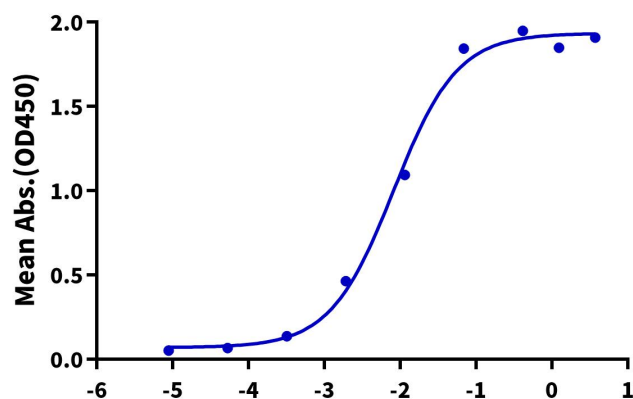


Immobilized Human VEGF165, No Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Human VEGF R2, His-Avi Tag with the EC50 of 1.27µg/ml determined by ELISA.

Log Biotinylated Human VEGF R2, His-Avi Tag Conc.(µg/ml)

**Biotinylated Human VEGF R2, His Tag ELISA**

0.05µg Biotinylated Human VEGF R2, His Tag Per Well



Immobilized Biotinylated Human VEGF R2, His Tag at 0.5µg/ml (100µl/well) on the streptavidin precoated plate (5µg/ml). Dose response curve for Anti-VEGF R2 Antibody, hFc Tag with the EC50 of 8.2ng/ml determined by ELISA.

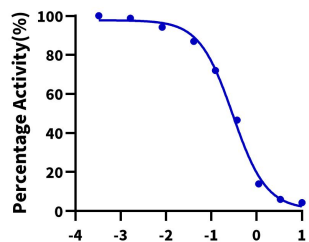
Log Anti-VEGF R2 Antibody, hFc Tag Conc.(µg/ml)

Blocking Data

Assay Data

Inhibition of Human VEGF165 and Biotinylated VEGF R2 Binding

0.1µg Human VEGF165, No Tag Per Well



Log Anti-VEGF165 Antibody, hFc Tag Conc.(µg/ml)

Serial dilutions of Anti-VEGF165 Antibody were added into Human VEGF165, No Tag: Biotinylated Human VEGF R2, His Avi Tag binding reactions. The half maximal inhibitory concentration (IC50) is 0.30µg/ml.