

# Biotinylated Human VEGF165 Protein

Cat. No. VEG-HM465B

## Description

<b>Source</b>	Recombinant Biotinylated Human VEGF165 Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Ala27-Arg191.
<b>Accession</b>	P15692-4
<b>Molecular Weight</b>	The protein has a predicted MW of 22.2 kDa. Due to glycosylation, the protein migrates to 28-35 kDa under reduced (R) condition, 45-60 kDa under Non reducing (N) condition based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE

## Formulation and Storage

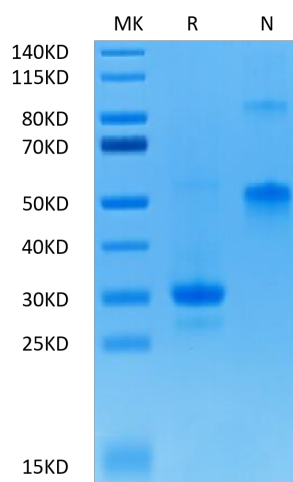
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<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

Vascular endothelial growth factor (VEGF or VEGF-A), also known as vascular permeability factor (VPF), is a potent mediator of both angiogenesis and vasculogenesis in the fetus and adult. VEGF165 appears to be the most abundant and potent isoform, followed by VEGF121 and VEGF189.

## Assay Data

### Bis-Tris PAGE

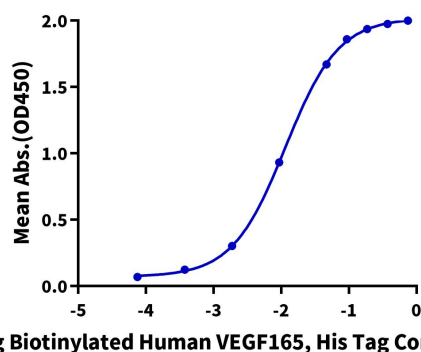


Biotinylated VEGF165 on Bis-Tris PAGE under reduced (R) condition and Non reducing (N) condition. The purity is greater than 95%.

### ELISA Data

#### Biotinylated Human VEGF165, His Tag ELISA

0.1µg Anti-VEGF165 Antibody, hFc Tag Per Well



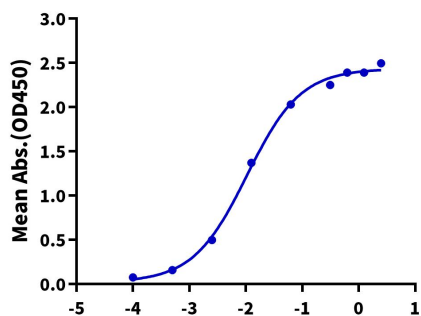
Immobilized Anti-VEGF165 Antibody at 1µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Human VEGF165, His Tag with the EC50 of 11.6ng/ml determined by ELISA.

Assay Data

ELISA Data

**Biotinylated Human VEGF165, His Tag ELISA**

0.1µg Human VEGF R1, His Tag Per Well



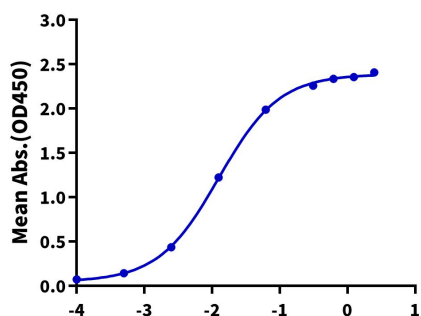
Immobilized Human VEGF R1, His Tag at 1µg/ml(100µl/well) on the plate. Dose response curve for Biotinylated Human VEGF165, His Tag with the EC50 of 10.5ng/ml determined by ELISA.

Log Biotinylated Human VEGF165, His Tag Conc.(µg/ml)

ELISA Data

**Biotinylated Human VEGF165, His Tag ELISA**

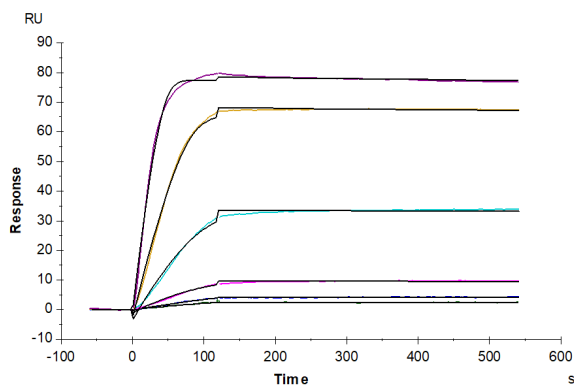
0.2µg Human VEGF R2, hFc Tag Per Well



Immobilized Human VEGF R2, hFc Tag at 2µg/ml(100µl/well) on the plate. Dose response curve for Biotinylated Human VEGF165, His Tag with the EC50 of 12.6ng/ml determined by ELISA.

Log Biotinylated Human VEGF165, His Tag Conc.(µg/ml)

SPR Data



Biotinylated Human VEGF165, His Tag captured on CM5 Chip via streptavidin can bind Human VEGF R1, His Tag with an affinity constant of 1.36 pM as determined in SPR assay (Biacore T200).