

# Non-biotinylated Human VEGF R1/FLT-1 Protein, Ultra Low Endotoxin



Cat. No. VGF-HM4R1-UL

## Description

<b>Source</b>	Recombinant Human VEGF R1/FLT-1 Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Ser27-Asn756.
<b>Accession</b>	P17948-1
<b>Molecular Weight</b>	The protein has a predicted MW of 85.1 kDa. Due to glycosylation, the protein migrates to 100-120 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, 8% trehalose (pH 7.4).
<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

VEGFR1 (vascular endothelial growth factor receptor 1), also called Flt-1 (Fms-like tyrosine kinase), is a 180 kDa type I transmembrane glycoprotein in the class III subfamily of receptor tyrosine kinases (RTKs). yrosine-protein kinase that acts as a cell-surface receptor for VEGFA, VEGFB and PGF, and plays an essential role in the development of embryonic vasculature, the regulation of angiogenesis, cell survival, cell migration, macrophage function, chemotaxis, and cancer cell invasion. May play an essential role as a negative regulator of embryonic angiogenesis by inhibiting excessive proliferation of endothelial cells.

## Assay Data

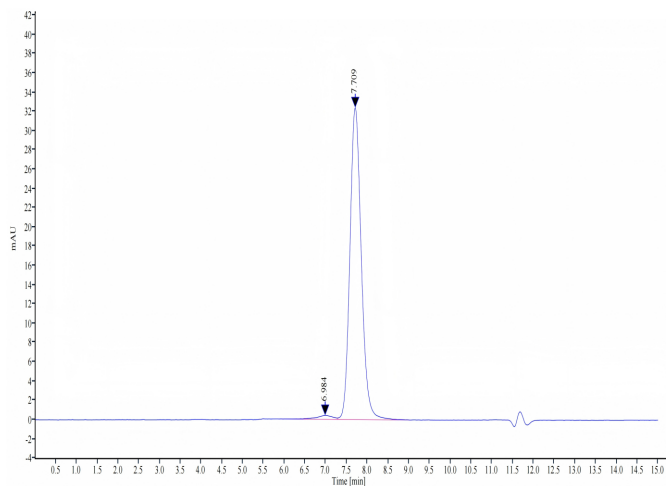
### Bis-Tris PAGE



Human VEGF R1 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

Assay Data

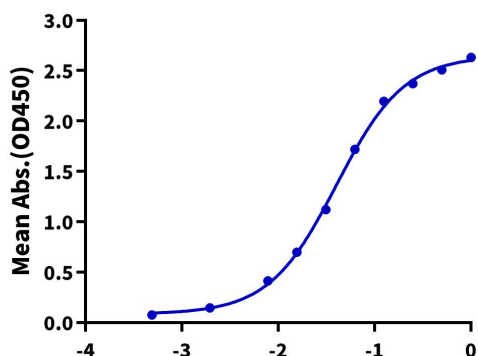


The purity of Human VEGF R1 is greater than 95% as determined by SEC-HPLC.

ELISA Data

**Human VEGF R1, His Tag ELISA**

0.2µg Human VEGF R1, His Tag Per Well

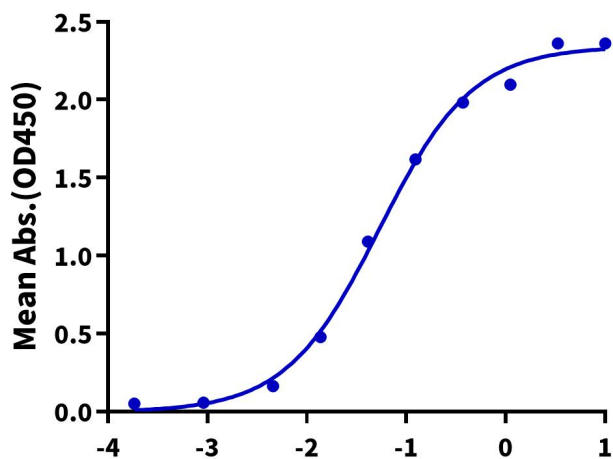


Log Biotinylated Human VEGF121, His Avi Tag Conc.(µg/ml)

Immobilized Human VEGF R1, His Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Human VEGF121, His Tag with the EC50 of 40.3ng/ml determined by ELISA (QC Test).

**Human VEGF R1, His Tag ELISA**

0.05µg Human PGF, hFc Tag Per Well



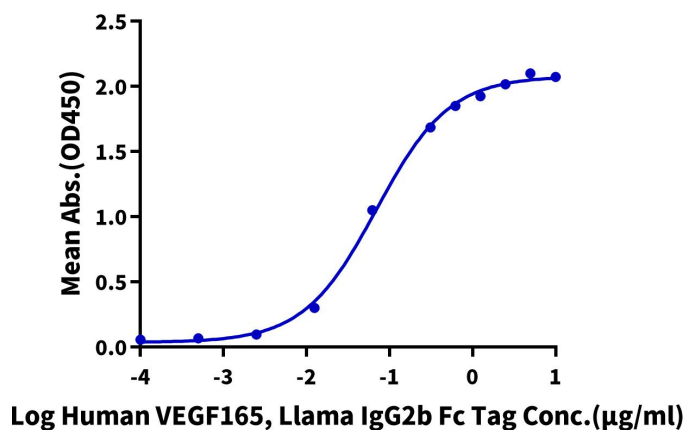
Log Human VEGF R1, His Tag Conc.(µg/ml)

Immobilized Human PGF, hFc Tag at 0.5µg/ml (100µl/Well) on the plate. Dose response curve for Human VEGF R1, His Tag with the EC50 of 53.4ng/ml determined by ELISA.

Assay Data

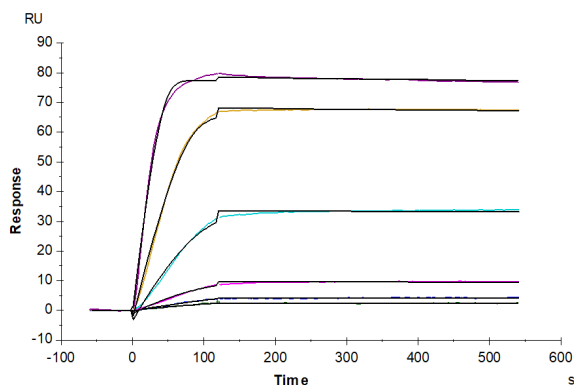
**Human VEGF R1, His Tag ELISA**

0.2µg Human VEGF R1, His Tag Per Well



Immobilized Human VEGF R1, His Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Human VEGF165, Llama IgG2b Fc Tag with the EC50 of 69.9ng/ml determined by ELISA.

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).