

Human VEGF R1/FLT-1 Protein

Cat. No. VGF-HM4R1

Description

Source	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.
Accession	P17948-1
Molecular Weight	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.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE

Formulation and Storage

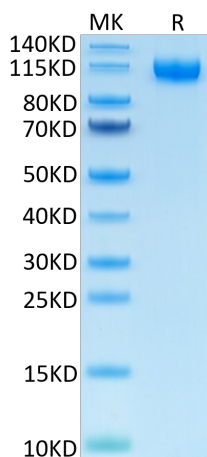
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled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



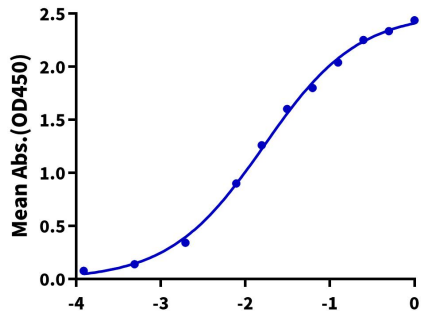
Human VEGF R1 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

ELISA Data

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 Biotinylated Human VEGF121, His Tag with the EC50 of 16.5ng/ml determined by ELISA (QC Test).

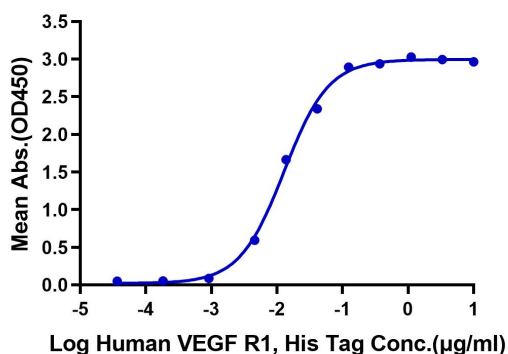
Log Biotinylated Human VEGF121, His Tag Conc.(µg/ml)

Assay Data

ELISA Data

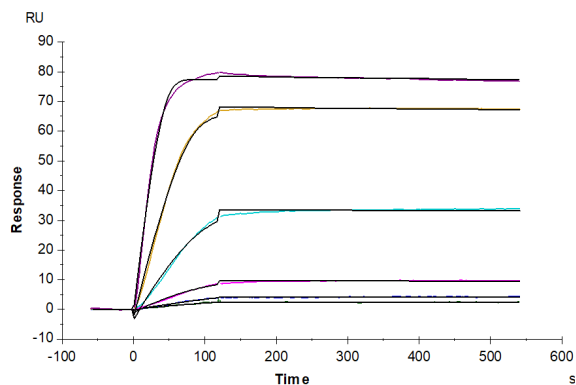
Human VEGF R1, His Tag ELISA

0.05µg Human PGF, hFc Tag Per Well



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 12.8ng/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).