

# Human VEGFR2 Protein; His Tag

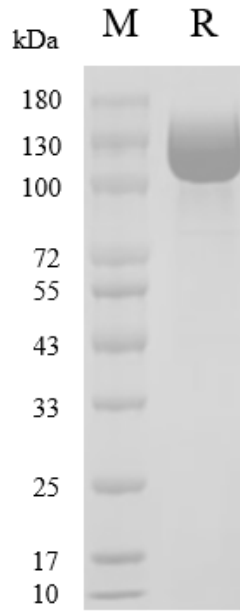
## Product Information

<b>Product Name</b>	Human VEGFR2 Protein; His Tag
<b>Storage temp.</b>	Store at $\leq -70^{\circ}\text{C}$ , stable for 6 months after receipt. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.
<b>Catalog# / Size</b>	<b>GM-87862RP-100 / 100 <math>\mu\text{g}</math></b> <b>GM-87862RP-1000 / 1 mg</b>

## Protein Information

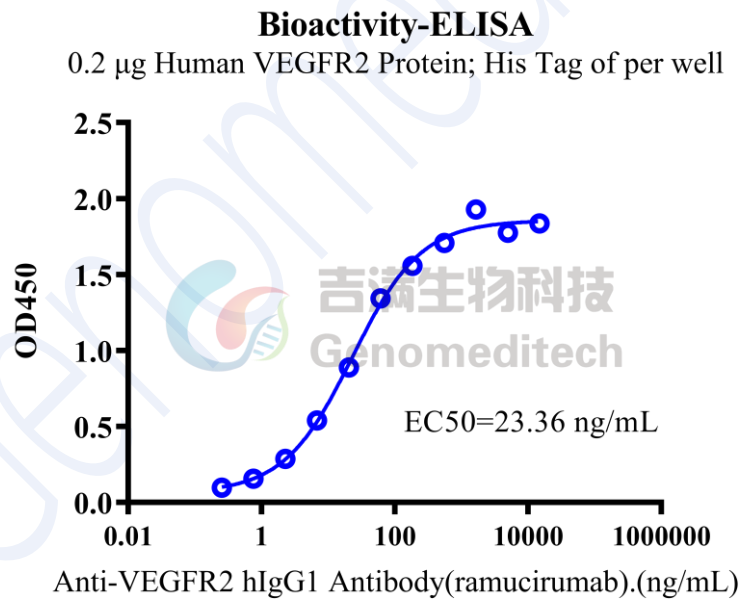
<b>Alternative Names</b>	KDR,CD309,FLK1,VEGF R2
<b>Source</b>	Human VEGFR2 Protein; His Tag (GM-87862RP) is expressed from human 293 cells (HEK-293). It contains AA Ala20-Glu764 (Accession # P35968-1). This protein carries a His tag at the C-terminus.
<b>Purity</b>	> 90% as determined by SDS-PAGE
<b>Endotoxin</b>	< 1 EU/ $\mu\text{g}$ , determined by LAL gel clotting assay
<b>Predicted Mol Mass</b>	82.7 KDa
<b>Formulation</b>	Supplied as a 0.2 $\mu\text{m}$ filtered solution of PBS, pH7.4.
<b>Description</b>	VEGFR2 (Vascular Endothelial Growth Factor Receptor 2) is a key tyrosine kinase receptor in vascular endothelial cells. It binds to VEGF, activating pathways like PI3K/AKT and MAPK to regulate angiogenesis, vascular permeability, cell proliferation, and migration. VEGFR2 is crucial for embryonic development and tumor growth, with abnormal expression linked to tumor angiogenesis and invasion, making it a key anti-angiogenesis target. Composed of extracellular, transmembrane, and intracellular domains, VEGFR2 shows abnormal expression in conditions like cancer and ocular diseases. Targeted inhibitors, such as tyrosine kinase inhibitors and antibody drugs, are widely used in clinical therapies, marking VEGFR2 as a focus for cancer and anti-angiogenesis drug research.

## SDS-PAGE



On SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

## Bioactivity-ELISA



Human VEGFR2 Protein; His Tag (Catalog # GM-87862RP) was immobilized at 2 µg/ml (100 µL/well). Increasing concentrations of Anti-VEGFR2 hIgG1 Antibody(ramucirumab) (Catalog # GM-80717AB) were added.