

# Human VEGF165 Protein; His Tag

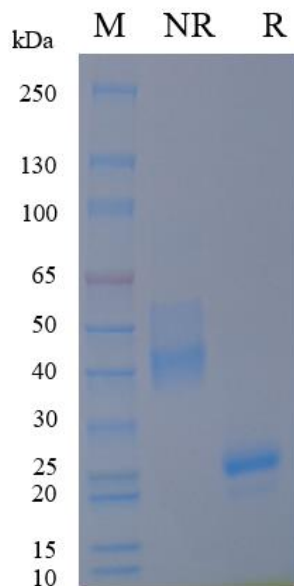
## Product Information

Product Name	Human VEGF165 Protein; His Tag
Storage temp	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.
Catalog# / Size	GM-88072RP-100 / 100 $\mu\text{g}$ GM-88072RP-1000 / 1 mg

## Protein Information

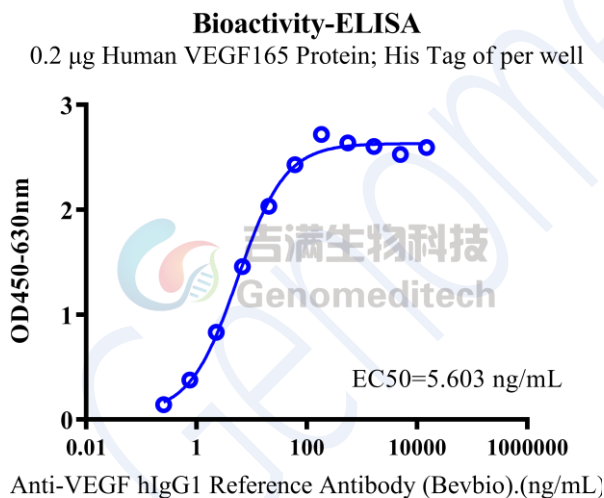
Alternative Names	RP1-261G23.1, MGC70609, MVCD1, VEGFA, VPF
Source	Human VEGF165 Protein; His Tag (GM-88072RP) is expressed from human 293 cells (HEK-293). It contains AA Ala 27 - Arg 191 (Accession # P15692-4). This protein carries a His tag at the N-terminus.
Purity	> 95% as determined by SDS-PAGE
Endotoxin	< 1 EU/ $\mu\text{g}$ , determined by LAL gel clotting assay
Predicted Mol Mass	20.0 KDa
Formulation	Supplied as a 0.2 $\mu\text{m}$ filtered solution of PBS, pH7.2-7.4.
Description	<p>VEGFA (Vascular Endothelial Growth Factor A) is a key pro-angiogenic factor. It mainly activates downstream signaling pathways by binding to VEGF receptors (such as VEGFR1/VEGFR2), promoting proliferation, migration, and neovascularization of endothelial cells. It plays important roles in embryonic development, tissue repair, and physiological maintenance of vasculature, while also having significant impacts in pathological contexts such as tumor growth, inflammation, and chronic diseases.</p> <p>VEGFA gene(s) have multiple splicing variants, with the most common being VEGF-A165 and VEGF-A121. These are produced by different exon combinations and exhibit distinct diffusion properties and biological activities. VEGFA acts in concert with its receptor signaling axis (primarily VEGFR2/KDR), triggering pathways such as PI3K/AKT and MAPK/ERK to regulate the formation, stability, and permeability of vascular networks. These variants and regulatory mechanisms together determine the intensity and spatial-temporal distribution of angiogenesis.</p>

## SDS-PAGE

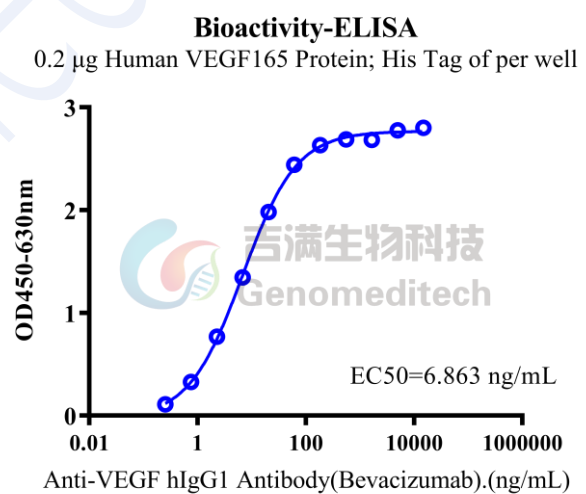


On SDS-PAGE under non-reducing (NR) condition and reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

## Bioactivity-ELISA



Human VEGF165 Protein; His Tag (Catalog # GM-88072RP) was immobilized at 2 µg/ml (100 µL/well). Increasing concentrations of Anti-VEGF hIgG1 Reference Antibody (Bevbio) (Catalog # GM-87758MAB) were added.



Human VEGF165 Protein; His Tag (Catalog # GM-88072RP) was immobilized at 2 µg/ml (100 µL/well). Increasing concentrations of Anti-VEGF hIgG1 Antibody (Bevacizumab) (Catalog # GM-51978AB) were added.