

## GFH116AF Recombinant Human VEGF-121 (Animal-Free)

### Description

Vascular Endothelial Growth Factor A (VEGF-A) is produced by a wide variety of cell types, including tumor and vascular cells. VEGF-A is a mediator of vascular growth, vascular permeability, and plays a role in stimulating vasodilation via nitric oxide-dependent pathways. VEGF-A has several alternatively spliced isoforms, with one being VEGF-121. The VEGF-121 isoform is a secreted protein that acts on receptors VEGFR-1 and VEGFR-2 to modulate endothelial cell function.

This product is produced with no animal derived raw products. All processing and handling employs animal free equipment and animal free protocols.

<b>Length</b>	121 / 242 aa
<b>Molecular Weight</b>	14.1 / 28.3 kDa
<b>Source</b>	E. coli
<b>Accession Number</b>	P15692-9
<b>Purity</b>	≥95% determined by reducing and non-reducing SDS-PAGE

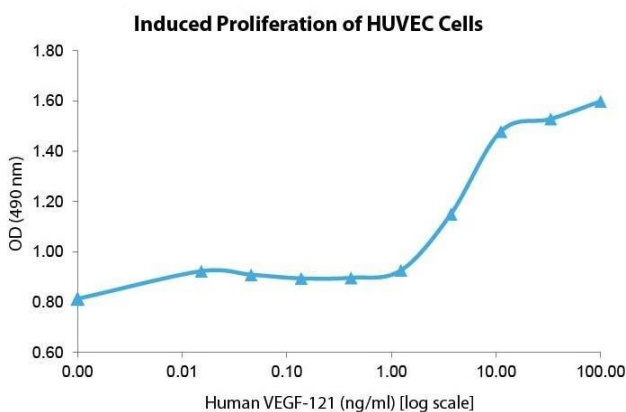
### Specifications

<b>Alternative Names</b>	Vascular Endothelial Growth Factor, VEGF121, VEGF
<b>Biological Activity</b>	Human VEGF-121 is fully biologically active when compared to standard. The activity is determined by the proliferation of HUVEC cells and it is typically less than 5 ng/ml. This corresponds to an expected specific activity of $2 \times 10^5$ units/mg.
<b>Endotoxin Level</b>	≤1.00 EU/μg as measured by kinetic LAL
<b>Formulation</b>	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 0.1% Trifluoroacetic Acid (TFA)
<b>AA Sequence</b>	MAPMAEGGGQ NHHEVVKFMD VYQRSYCHPI ETLVDIFQEY PDEIEYIFKP SCVPLMRCGG CCNDEGLECV PTEESNITMQ IMRIKPHQGQ HIGEMSFLQH NKCECRPKKD RARQENC DKP RR

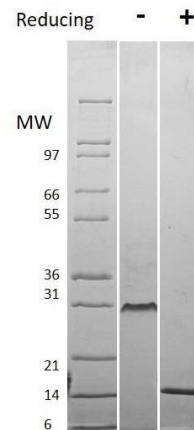
### Preparation and Storage

<b>Reconstitution</b>	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/ml, which can be further diluted into other aqueous solutions.
<b>Stability and Storage</b>	12 months from date of receipt when stored at -20°C to -80°C as supplied. 1 month when stored at 4°C after reconstituting as directed. 3 months when stored at -20°C to -80°C after reconstituting as directed.

### Data



Induced proliferation of HUVEC cells for Human VEGF-121. Cell proliferation was measured to calculate the ED50, which is as expected less than 5 ng/ml.



Non-reducing (-) and reducing (+) conditions in a 4 - 20% Tris-Glycine gel stained with Coomassie Blue. 1 μg of protein was loaded in each lane. Human VEGF-121 has a predicted Mw of 28.3 kDa (each monomer is 14.1 kDa).