

GFH116 Recombinant Human VEGF-121

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.

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

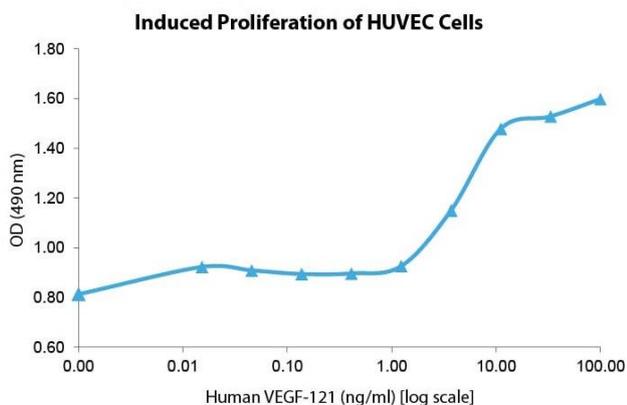
Specifications

Alternative Names	Vascular Endothelial Growth Factor, VEGF121, VEGF
Biological Activity	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 2×10^5 units/mg.
Endotoxin Level	≤1.00 EU/μg as measured by kinetic LAL
Formulation	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 0.1% Trifluoroacetic Acid (TFA)
AA Sequence	MPMAEGGGQN HHEVVKFMDV YQRSYCHPIE TLVDIFQEYP DEIEYIFKPS CVPLMRCGGC CNDEGLECVP TEESNITMQI MRIKPHQGQH IGEMSFLLQHN KCECRPKKDR ARQENCDKPR R

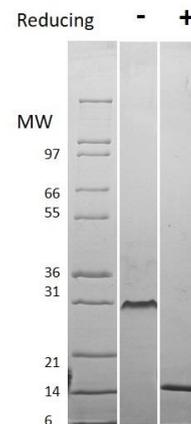
Preparation and Storage

Reconstitution	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.
Stability and Storage	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).