

## ARG70137 Human VEGF121 recombinant protein (Active) (His-tagged, C-ter)

Package: 100 µg, 20 µg  
Store at: -20°C

### Summary

Product Description	E. coli expressed, His-tagged (C-ter) Active Human VEGF121 recombinant protein
Tested Application	SDS-PAGE
Target Name	VEGF121
Species	Human
A.A. Sequence	Ala1 - Arg121
Expression System	E. coli
Activity	Active
Activity Note	Determined by its ability to induce proliferation in HUVEC cells. The ED50 for this effect is < 2.5 ng/mL.
Alternate Names	MVCD1; Vascular permeability factor; VEGF-A; VPF; VEGF; Vascular endothelial growth factor A

### Properties

Form	Powder
Purification Note	Endotoxin level is less than 0.1 EU/µg of the protein, as determined by the LAL test.
Purity	> 95% (by SDS-PAGE)
Buffer	PBS (pH 8.0)
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 200 µg/mL and incubate the stock solution for at least 20 min at room temperature to make sure the protein is dissolved completely.
Storage instruction	For long term, lyophilized protein should be stored at -20°C or -80°C. After reconstitution, aliquot and store at -20°C or -80°C for up to one month. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening.
Note	For laboratory research only, not for drug, diagnostic or other use.

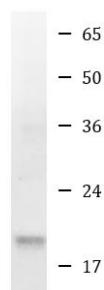
### Bioinformation

Gene Symbol	VEGFA
Gene Full Name	vascular endothelial growth factor A
Background	This gene is a member of the PDGF/VEGF growth factor family and encodes a protein that is often found as a disulfide linked homodimer. This protein is a glycosylated mitogen that specifically acts on endothelial cells and has various effects, including mediating increased vascular permeability, inducing angiogenesis, vasculogenesis and endothelial cell growth, promoting cell migration, and inhibiting apoptosis. Elevated levels of this protein is linked to POEMS syndrome, also known as Crow-Fukase syndrome. Mutations in this gene have been associated with proliferative and nonproliferative diabetic retinopathy. Alternatively spliced transcript variants, encoding either freely secreted or cell-associated isoforms, have been characterized. There is also evidence for the use of non-AUG (CUG) translation initiation sites upstream of, and in-frame with the first AUG, leading to additional isoforms. [provided by RefSeq, Jul 2008]

Function	Growth factor active in angiogenesis, vasculogenesis and endothelial cell growth. Induces endothelial cell proliferation, promotes cell migration, inhibits apoptosis and induces permeabilization of blood vessels. Binds to the FLT1/VEGFR1 and KDR/VEGFR2 receptors, heparan sulfate and heparin. NRP1/Neuropilin-1 binds isoforms VEGF-165 and VEGF-145. Isoform VEGF165B binds to KDR but does not activate downstream signaling pathways, does not activate angiogenesis and inhibits tumor growth. [UniProt]
Highlight	Related products: <a href="#">VEGF antibodies</a> ; <a href="#">VEGF ELISA Kits</a> ; <a href="#">VEGF Duos / Panels</a> ; <a href="#">VEGF recombinant proteins</a> ; Related news: <a href="#">The role of HDGF in tumor angiogenesis</a>
Cellular Localization	Secreted. Note=VEGF121 is acidic and freely secreted. VEGF165 is more basic, has heparin-binding properties and, although a significant proportion remains cell-associated, most is freely secreted. VEGF189 is very basic, it is cell-associated after secretion and is bound avidly by heparin and the extracellular matrix, although it may be released as a soluble form by heparin, heparinase or plasmin. [UniProt]

## Images

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Human VEGF (isoform 121)  
recombinant protein

ARG70137 Human VEGF121 recombinant protein (Active) (His-tagged, C-ter) SDS-PAGE image

SDS-PAGE analysis of ARG70137 Human VEGF121 recombinant protein (Active) (His-tagged, C-ter).