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# VEGF121 Protein (AA 28-147) (His tag)

3 Images



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#### Overview

Quantity:	50 μg
Target:	VEGF121
Protein Characteristics:	AA 28-147
Origin:	Human
Source:	Escherichia coli (E. coli)
Biological Activity:	Active
Purification tag / Conjugate:	This VEGF121 protein is labelled with His tag.
Application:	Activity Assay (AcA), Cell Culture (CC)

#### **Product Details**

Characteristics:	Tag location: N-terminal His Tag
Purity:	> 97 %
Biological Activity Comment:	VEGFA (Vascular endothelial growth factor A) is a growth factor and can be cleaved into several
	isoforms, including VEGF121. It induces endothelial cell proliferation, promotes cell migration,
	inhibits apoptosis and induces permeabilization of blood vessels. It is accepted that the
	VEGF121 isoform stimulates the proliferation of vein endothelial cells. Thus, proliferation assay
	of recombinant human VEGF121 was conducted using ECV-304 cells. Briefly, ECV-304 cells
	were seeded into triplicate wells of 96-well plates at a density of 2,000 cells/well and allowed to
	attach overnight, then the medium was replaced with serum-free standard 1640 prior to the
	addition of various concentrations of VEGF121. After incubated for 48h, cells were observed by
	inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly,
	10μL of CCK-8 solution was added to each well of the plate, then the absorbance at 450nm was

### **Product Details**

measured using a microplate reader after incubating the plate for 1-4 hours at 37°C. Proliferation of ECV-304 cells after incubation with VEGF121 for 48h observed by inverted microscope was shown in Figure 1. Cell viability was assessed by CCK-8 (Cell Counting Kit-8) assay after incubation with human recombinant VEGF121 for 48h. The result was shown in Figure 2. It was obvious that VEGF121 significantly increased cell viability of ECV-304 cells.

# Target Details

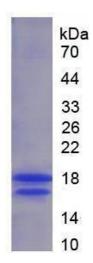
Target:	VEGF121
Alternative Name:	Vascular Endothelial Growth Factor 121 (VEGF121) (VEGF121 Products)
Molecular Weight:	17/18kDa
UniProt:	P15692

## **Application Details**

Application Notes:	Isoelectric Point: Reconstitute in 20 mM Tris, 150 mM NaCl (pH 8.0) to a concentration of 0.1-
	1.0 mg/mL. Do not vortex.
Restrictions:	For Research Use only

### Handling

Format:	Lyophilized
Buffer:	20 mM Tris, 150 mM NaCl, pH 8.0, containing 1 mM EDTA, 1 mM DTT, 0.01 % SKL, 5 % Trehalose and Proclin300.
Preservative:	Dithiothreitol (DTT), Other preservative, ProClin
Precaution of Use:	This product contains ProClin and Dithiothreitol (DTT): POISONOUS AND HAZARDOUS SUBSTANCES which should be handled by trained staff only.





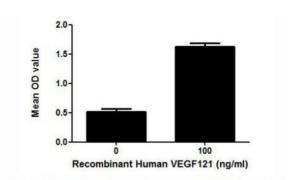
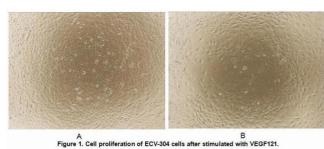


Figure 2. Cell proliferation of ECV-304 cells after stimulated with VEGF121.

Image 2. VEGFA (Vascular endothelial growth factor A) is a growth factor and can be cleaved into several isoforms, including VEGF121. It induces endothelial cell proliferation, promotes cell migration, inhibits apoptosis and induces permeabilization of blood vessels. It is accepted that the VEGF121 isoform stimulates the proliferation of vein endothelial cells. Thus, proliferation assay of recombinant human VEGF121 was conducted using ECV-304 cells. Briefly, ECV-304 cells were seeded into triplicate wells of 96well plates at a density of 2,000 cells/well and allowed to attach overnight, then the medium was replaced with serum-free standard 1640 prior to the addition of various concentrations of VEGF121. After incubated for 48h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10µL of CCK-8 solution was added to each well of the plate, then the absorbance at 450nm was measured using a microplate reader after incubating the plate for 1-4 hours at 37°C. Proliferation of ECV-304 cells after incubation with VEGF121 for 48h observed by inverted microscope was shown in Figure 1. Cell viability was assessed by CCK-8 (Cell Counting Kit-8 ) assay after incubation with human recombinant VEGF121 for 48h. The result was shown in Figure 2. It was obvious that VEGF121 significantly increased cell viability of

ECV-304 cells.



(A) ECV-304 cells cultured in 1640, stimulated with 100ng/mL VEGF121 for 48h;

(B) Unstimulated ECV-304 cells cultured in 1640 for 48h.

Image 3.