

Vascular Endothelial Growth Factor 121 (VEGF121) Active Protein | VEGF121 active protein

Active Vascular Endothelial Growth Factor 121 (VEGF121)

CATALOG # AAA148143	REACTIVITY Human	APPLICATIONS Activity Assay, Cell Culture
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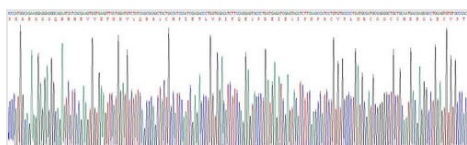
PRODUCT SYNONYMS

Vascular Endothelial Growth Factor 121 (VEGF121); Active Vascular Endothelial Growth Factor 121 (VEGF121); VEGF121 active protein

PRODUCT SPECIFICATIONS

Reactivity	Human
Purity/Purification	> 97%
Form/Format	Freeze-dried powder
Sequence Length	412
Applicable Applications for VEGF121 active protein	Activity Assay, Cell Culture
Tag	N-terminal His Tag
Buffer Formulation	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Fragment	Pro28~Arg147

IMAGES



Application Data

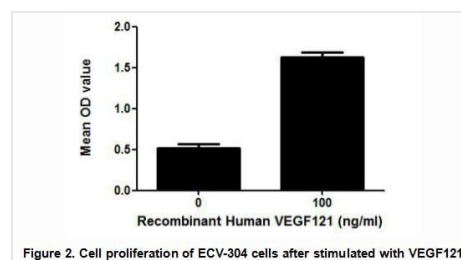
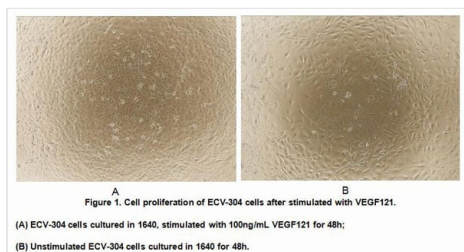
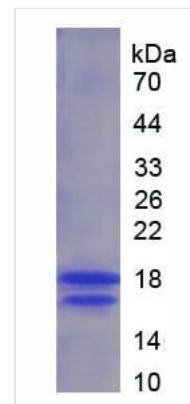


Figure 2. Cell proliferation of ECV-304 cells after stimulated with VEGF121.

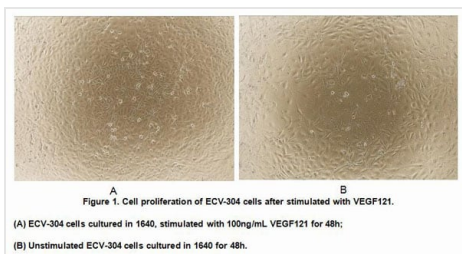
Application Data



Application Data



SDS-PAGE



Activity

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, 10uL 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 degree 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.

ADDITIONAL INFORMATION

Product Categories/Family for VEGF121 active protein

Cytokine; Signal transduction; Tumor immunity; Infection immunity

NCBI AND UNIPROT INFORMATION

NCBI GI #	76781480
NCBI GeneID	7422
NCBI Accession #	NP_001020537.2
NCBI GenBank Nucleotide #	NM_001025366.2
UniProt Accession #	P15692; O60720; O75875; Q074Z4; Q16889; B5BU86; H0Y2S8; H0Y407; H0Y414; H0Y462; H0Y8N2; H3BLW7
Molecular Weight	Predicted Molecular Weight: 18.2kDa Accurate Molecular Weight: 17; 18kDa
NCBI Official Full Name	vascular endothelial growth factor A isoform a
NCBI Official Synonym Full Names	vascular endothelial growth factor A
NCBI Official Symbol	VEGFA
NCBI Official Synonym Symbols	VPF; VEGF; MVCD1
NCBI Protein Information	vascular endothelial growth factor A
UniProt Protein Name	Vascular endothelial growth factor A
UniProt Gene Name	VEGFA
UniProt Synonym Gene Names	VEGF; VEGF-A; VPF

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.