

Active Recombinant Human Vascular Endothelial Growth Factor A

Cat. No. VEGFA-583H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human VEGF-121 produced in E.Coli is a double, non-glycosylated, polypeptide chain containing 121 amino acids and having a molecular mass of 28423 Dalton.
Species	Human
Source	E.coli
Description	Vascular endothelial growth factor A (VEGF-A) is a protein that in humans is encoded by the VEGFA gene.
Form	Lyophilized with no additives.
Purity	Purity Greater than 95% as determined by: Analysis by RP-HPLC. Reducing and non-reducing SDS-PAGE.
Bio-activity	The biological activity is determined by the dose-dependent stimulation of the proliferation of human umbilical vein endothelial cells (HUVEC) using a concentration range of 0.1-0.4 ng/ml.
Physical Appearance	Sterile Filtered white lyophilized (freeze-dried) powder.
Solubility	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

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

recommended to reconstitute the lyophilized VEGF in sterile water at a concentration of 0.1 mg/s/ml, which can then be further diluted to other aqueous solutions.

Purity Greater than 95% as determined by

Analysis by RP-HPLC. Reducing and non-reducing SDS-PAGE.

Protein Content determined by

UV spectroscopy at 280 nm. Analysis by RP-HPLC calibrated against a known standard. Quantitation on SDS-PAGE against a known standard.

Endotoxin Level

Endotoxin level as measured by LAL is <0.01ng/ug or <0.1EU/ug.

Amino acid sequence

APMAEGGGQN HHEVVKFMDV YQRSYCHPIE TLVDIFQEYP DEIEYIFKPS
CVPLMRCGGC CNDEGLECVP TEESNITMQI MRIKPHQQQH IGEMSFLQHN
KCECRPKKDR ARQENCDKPR R

Storage

Lyophilized product is very stable at -20 degrees. Reconstituted material should be aliquoted and frozen at -20. It is recommended to add a carrier protein (0.1% HSA or BSA) for long term storage.

GENE INFORMATION

Gene Name

VEGFA vascular endothelial growth factor A [Homo sapiens]

Official Symbol

VEGFA

Synonyms

VPF; VEGF; VEGFA_HUMAN; Vascular permeability factor; VEGF-A; VEGFA; MGC70609; Vegf120; Vegf164; Vegf188; vascular endothelial growth factor A; MGC70609; Vascular endothelial growth factor A precursor; Vascular permeability factor

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Gene ID	7422
mRNA Refseq	NM_001025366
Protein Refseq	NP_001020537
MIM	192240
UniProt ID	P15692
Chromosome Location	6p12
Pathway	Cytokine-cytokine receptor interaction; Focal adhesion; Pancreatic cancer; Renal cell carcinoma; VEGF signaling pathway; mTOR signaling pathway; Hemostasis; Signaling by VEGF.
Function	cell surface binding ;extracellular matrix binding; growth factor activity; growth factor activity; heparin binding; platelet-derived growth factor receptor binding; protein binding; protein homodimerization activity; vascular endothelial growth factor receptor binding.
PDBrendering based on 1bj1.	