

Vascular Endothelial Growth Factor Active Protein | VEGF active protein

Recombinant Human Vascular Endothelial Growth Factor (121)

CATALOG #
AAA38168

HOST
E Coli

PRODUCT SYNONYMS

Vascular Endothelial Growth Factor; Recombinant Human Vascular Endothelial Growth Factor (121); VEGF (121 a.a.) Human; Vascular Endothelial Growth Factor (121 a.a.) Human Recombinant; Vascular endothelial growth factor A; VEGF-A; Vascular permeability factor; VPF; VEGF; MGC70609; VEGF (121a.a.); VEGF active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 98.0% as determined by (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Form/Format	The protein was lyophilized from a concentrated (1mg/ml) solution with no additives. Sterile Filtered White lyophilized (freeze-dried) powder.
Sequence	APMAEGGGQN HHEVVKFMDV YQRSYCHPIE TLVDIFQEYP DEIEYIFKPS CVPLMRCGGC CNDEGLECVPT TEESNITMQI MRKPHQQQH IGEMSFLQHN KCECRPKKDR ARQENC DKPR R
Sequence Length	412
Solubility	It is recommended to reconstitute the lyophilized Vascular Endothelial Growth Factor -121 in sterile 18M Omega - cm H ₂ O not less than 100 ug/ml, which can then be further diluted to other aqueous solutions.
Biological Activity	Determined by the dose-dependent stimulation of the proliferation of human umbilical vein endothelial cells (HUVEC) using a concentration range of 0.2-0.4 ng/ml corresponding to a specific activity of 2.5-5MU/mg.
Preparation and Storage	Lyophilized Vascular Endothelial Growth Factor 121 although stable at room temperature for 3 weeks, should be stored desiccated below -18 degree C. Upon reconstitution VEGF-121 should be stored at 4 degree C between 2-7 days and for future use below -18 degree C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

ADDITIONAL INFORMATION

Related Product Information for VEGF active protein	Description: Vascular Endothelial Growth Factor-121 Human Recombinant produced in E Coli is a double, non-glycosylated, polypeptide chain containing 121 amino acids and having a molecular mass of 28423 Dalton. VEGF121 circulates more freely than other VEGF forms, which bind more tightly with vascular heparin sulfates. The VEGF-121 is purified by proprietary chromatographic techniques. Introduction: Vascular endothelial growth factor is an important signaling protein involved in both vasculogenesis and angiogenesis. As its name implies, VEGF activity has been mostly studied on cells of the vascular endothelium, although it does have effects on a number of other cell types (e.g. stimulation monocyte/ macrophagemigration, neurons, cancer cells, kidney epithelial cells). VEGF mediates increased vascular permeability, induces angiogenesis, vasculogenesis and endothelial cell growth, promotes cell migration, and inhibits apoptosis. In vitro, VEGF has been shown to stimulate endothelial cell mitogenesis and cell migration. VEGF is also a vasodilator and increases microvascular permeability and was originally referred to as vascular permeability factor. Elevated levels of this protein are linked to POEMS syndrome, also known as Crow-Fukase syndrome. Mutations in this gene have been associated with proliferative and nonproliferative diabetic retinopathy.
Product Categories/Family for VEGF active protein	Cytokines and Growth Factors; Growth Factors; VEGF

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	34,406 Da
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; vascular permeability factor
UniProt Protein Name	Vascular endothelial growth factor A
UniProt Gene Name	VEGFA
UniProt Synonym Gene Names	VEGF; VEGF-A; VPF
UniProt Entry Name	VEGFA_HUMAN

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.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-vegf-active-protein/vascular-endothelial-growth-factor/38168>