Recombinant Human VEGFA, Biotinylated

Cat. No. VEGFA-271H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Human VEGF121 Protein, Biotinylated (Biotinylated VEGF121) Ala 207 - Arg 327, was labeled with biotin based on rhVEGF121 Protein, which was produced in human 293 cells (HEK293).?
Species	Human
Source	HEK293
ProteinLength	207-327 a.a.
Description	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.
Form	Lyophilized from 0.22 μm filtered solution in PBS, pH7.4. Normally Trehalose are

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	added as protectants before lyophilization.
Molecular Mass	Biotinylated VEGF121, contains no "tag", has a calculated MW of 14 kDa (monomer). The predicted N-terminus is Ala 207. As a result of glycosylation, DTT-reduced Protein migrates as 19 kDa (monomer) and non-reduced protein migrates as 40 kDa (homodimer).
Endotoxin	Less than 1.0 EU per μg of the Biotinylated VEGF121 by the LAL method.
Purity	>95% as determined by reduced SDS-PAGE.
Storage	Avoid repeated freeze-thaw cycles. No activity loss was observed after storage at: In lyophilized state for 1 year (4°C); After reconstitution under sterile conditions for 3 months (-70°C).
Conjugation	Biotin

GENE INFORMATION

Gene Name	VEGFA vascular endothelial growth factor A [Homo sapiens]
Official Symbol	VEGFA
Synonyms	VEGFA; vascular endothelial growth factor A; vascular endothelial growth factor , VEGF; VEGF A; VPF; vascular permeability factor; VEGF; MVCD1; MGC70609;
Gene ID	7422
mRNA Refseq	NM_001025366
Protein Refseq	NP_001020537

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UniProt ID	P15692
Chromosome Location	6p12
Pathway	Bladder cancer, organism-specific biosystem; Bladder cancer, conserved biosystem; Cytokine-cytokine receptor interaction, organism-specific biosystem; Cytokine-cytokine receptor interaction, conserved biosystem; Endochondral Ossification, organism-specific biosystem; Focal adhesion, organism-specific biosystem; Focal adhesion, conserved biosystem;
Function	cell surface binding; chemoattractant activity; cytokine activity; cytokine activity; extracellular matrix binding; fibronectin binding; growth factor activity; growth factor activity; heparin binding; heparin binding; platelet-derived growth factor recep

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