

Recombinant Human VEGF121

Catalog No: C699

Description Recombinant Human Vascular Endothelial Growth Factor A is produced by our Mammalian expression

system and the target gene encoding Ala27-Arg147 is expressed with a 6His tag at the C-terminus.

Source **Human Cells**

Alternative name

Vascular endothelial growth factor A; VEGF-A; Vascular permeability factor; VPF; VEGFA; VEGF

P15692 Accession No.

Formulation Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.2.

Reconstitution Always centrifuge tubes before opening. Do not mix by vortex or pipetting.

It is not recommended to reconstitute to a concentration less than 100µg/ml.

Dissolve the lyophilized protein in distilled water.

Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Quality Control Purity: Greater than 95% as determined by reducing SDS-PAGE.

> Endotoxin: Less than 0.1 ng/μg (1 IEU/μg) as determined by LAL test.

Shipping The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

Storage Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks.

> Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Amino Acid Sequence

APMAEGGGQNHHEVVKFMDVYQRSYCHPIETLVDIFQEYPDEIEYIFKPSCVPLMRCGGCCNDEGLECVPT

EESNITMQIMRIK PHQGQHIGEMSFLQHNKCECRPKKDRARQEKCDKPRRVDHHHHHH

Background Human VEGF121, also known as Vascular endothelial growth factor A, VEGFA, Vascular permeability factor, VPF and VEGF, is a homodimeric, heparin-binding glycoprotein which belongs to the platelet-derived growth factor (PDGF)/vascular endothelial growth factor (VEGF) family. VEGF-A is a glycosylated mitogen that specifically acts on endothelial cells and has various effects, including mediating increased vascular

permeability, inducing angiogenesis, vasculogenesis, permeabilization of blood vessels and endothelial cell growth, increasing microvascular permeability, promoting cell migration and inhibiting apoptosis.

Alternatively spliced transcript variants of VEGF-A encod either secreted or cell-associated isoforms. The lymphangiogenesis may be promoted by upregulation of VEGF121, which may in turn act in part via induction of VEGF-C. It binds to the FLT1/VEGFR1 and KDR/VEGFR2 receptors, heparan sulfate and heparin. NRP1/Neuropilin-1 binds isoforms VEGF-165 and VEGF-145. Isoform VEGF165B binds to KDR but does not activate downstream signaling pathways, does not activate angiogenesis and inhibits tumor growth.

SDS-Page

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