VEGF $_{121}$ Human E. coli

Product Data Sheet

Type: Recombinant
Source: E. coli
Species: Human
Other names: Vascular Endothelial Growth Factor121, Vascular Endothelial Growth Factor, VPF

Cat. No.:

RBG10341002	(2 µg)
RBG10341010	(10 µg)
RBG10341100	(100 µg)

Description

VEGF is a potent growth and angiogenic cytokine. It stimulates proliferation and survival of endothelial cells, and promotes angiogenesis and vascular permeability. Expressed in vascularized tissues, VEGF plays a prominent role in normal and pathological angiogenesis. VEGF signals through three receptors; fms-like tyrosine kinase (flt-1), KDR gene product (the murine homolog of KDR is the flk-1 gene product) and the flt4 gene product. Due to its increased acidity, VEGF121 circulates more freely than other VEGF forms, which bind more tightly with vascular heparin sulfates. Recombinant Human VEGF $_{121}$ is a 28.4 kDa, disulfide-linked homodimeric protein consisting of two 121 amino acid polypeptide chains.

Research topic

Cardiovascular disease, Coronary artery disease, Oncology

Amino Acid Sequence

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

E. coli

Purity

98%

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.

Endotoxin

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

Reconstitution

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

Storage, Stability/Shelf Life

-20°C

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