VEGF $_{165}$ Rat E. coli

Product Data Sheet

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

Cat. No.:

RBG30078002	(2 µg)
RBG30078010	(10 µg)
RBG30078100	(100 µg)

Description

VEGF is a potent growth and angiogenic cytokine. It stimulates proliferation and survival of endothellial cells, and promotes angiogenesis and vascular permeability. Expressed in vascularized tissues, VEGF plays a prominent role in normal and pathological angiogenesis. Substantial evidence implicates VEGF in the induction of tumor metastasis and intra-ocular neovascular syndromes. VEGF signals through the 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. Recombinant Rat VEGF $_{165}$ is a 38.5 kDa, disulfide-linked homodimeric protein consisting of two 165 amino acid polypeptide chains.

Research topic

Cardiovascular disease, Coronary artery disease, Oncology

Amino Acid Sequence

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MAPTTEGEQK AHEVVKFMDV YQRSYCRPIE TLVDIFQEYP DEIEYIFKPS CVPLMRCAGC CNDEALECVP TSESNVTMQI
MRIKPHQSQH IGEMSFLQHS RCECRPKKDR TKPEKHCEPC SERRKHLFVQ DPQTCKCSCK NTDSRCKARQ LELNERTCRC DKPRR
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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). The expected ED $_{50}$ is 4.0-8.0 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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