VEGF-B Human E. coli

Product Data Sheet

Type: Recombinant
Source: E. coli
Species: Human
Other names: Vascular Endothelial Growth Factor-B, VEGF-related factor, VRF

Cat. No.:

RBG10343005	(5 µg)
RBG10343020	(20 µg)
RBG10343100	(100 µg)

Description

VEGF-B, a member of the VEGF family, is a potent growth and angiogenic cytokine. It promotes DNA synthesis in endothelial cells, helps regulate angiogenesis and vascular permeability, and inhibits apoptosis in certain smooth muscle cells and neurons. VEGF-B is expressed in all tissues except the liver. It forms cell surface-associated, disulfide-linked homodimers, and can form heterodimers with VEGF-A. There are two known isoforms, formed by alternative splicing, which have been designated VEGF-B167 and VEGF-B186. Both forms have identical amino-terminal sequences encoding a cysteine knot-like structural motif, but differ in their carboxyl-terminal domains. Both VEGF-B isoforms signal only through the VEGFR1 receptor. Recombinant Human VEGF-B is a 38.0 kDa, disulfide-linked homodimeric protein consisting of two 167 amino acid polypeptide chains.

Research topic

Cardiovascular disease, Coronary artery disease, Oncology

Amino Acid Sequence

PVSQPDAPGH QRKVVSWIDV YTRATCQPRE VVVPLTVELM GTVAKQLVPS CVTVQRCGGC CPDDGLECVP TGQHQVRMQI LMIRYPSSQL GEMSLEEHSQ CECRPKKKDS AVKPDSPRPL CPRCTQHHQR PDPRTCRCRC RRRSFLRCQG RGLELNPDTC RCRKLRR

Source

E. coli

Purity

98%

Biological Activity

Determined by the dose-dependent stimulation of the proliferation of human umbilical vein endothelial cells (HUVEC) in the presence of human VEGF165. The expected ED_{50} for this effect is 1.0-2.0 µg/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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