DATASHEET
Version 20181206

VEGF165, Human

Cat. No.: Z02689-100

Size: 100.0 ug

Synonyms: VPF, Folliculostellate cell-derived growth factor, Glioma-derived endothelial cell mitogen

Description:

Vascular Endothelial Growth Factor (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, Vascular Endothelial Growth Factor (VEGF) plays a prominent role in normal and pathological angiogenesis. Substantial evidence implicates Vascular Endothelial Growth Factor (VEGF) in the induction of tumor metastasis and intra-ocular neovascular syndromes. Vascular Endothelial Growth Factor (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 human Vascular Endothelial Growth Factor A165 (rhVEGF-A165) produced in Pichia pastoris is a disulfide-linked homodimer containing two polypeptide chains of 165 amino acids each. A fully biologically active molecule, rhVEGF-A165 has a molecular mass of 38.2kDa analyzed by non-reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Amino Acid Sequence:

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00001 APMAEGGGQN HHEVVKFMDV YQRSYCHPIE TLVDIFQEYP
00041 DEIEYIFKPS CVPLMRCGGC CNDEGLECVP TEESNITMQI
00081 MRIKPHQGQH IGEMSFLQHN KCECRPKKDR ARQENPCGPC
00121 SERRKHLFVQ DPQTCKCSCK NTDSRCKARQ LELNERTCRC
00161 DKPRR
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Source: *P. pastoris*

Species: Human

Biological Activity: ED_{50} of 1-5ng/ml, measured by the dose-dependent stimulation of the proliferation of HUVEC cells, corresponding to a specific activity of 2x 10^5-1x 10^6 units/mg.

Molecular Weight: 38.2kDa, observed by non-reducing SDS-PAGE

Formulation: Lyophilized after extensive dialysis against 25 mM HEPES and 150 mM NaCl, pH 7.0.

Reconstitution: Reconstituted in ddH_2O at 100 µg/ml.

Purity: > 95% as analyzed by reducing SDS-PAGE.

Endotoxin Level: <0.5 EU/µg, determined by LAL method.

Storage: Lyophilized recombinant human Vascular Endothelial Growth Factor A165 (rhVEGF-A165) remains stable up to 12 months at lower than -70°C from date of receipt. Upon reconstitution, rhVEGF-A165 should be stable up to 4 week at 4°C or up to 6 months at -20°C.

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