

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant VEGF165, Human

Catalog Number: BK0352-1mg

Source: *P. pastoris*

Quantity: 1mg

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.

Molecular Weight:

38.2kDa, observed by non-reducing SDS-PAGE

Purity:

> 95% as analyzed by reducing SDS-PAGE.

Biological Activity:

ED50 of 1-5ng/ml, measured by the dose-dependent stimulation of the proliferation of HUVEC cells, corresponding to a specific activity of 2×10^5 - 1×10^6 units/mg.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

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

AA Sequence:

APMAEGGGQNH-
HEVVKFMDEVYQRSYCHPIETLVDIFQEYYPDEIEYI
FKP-
SCVPLMRCGGCCNDEGLECVPTTEESNITMQIM-
RIKPHQGQHIGEMSFLLQHNKCECRPKKDRARQE
NPCGPCSERRKHLFVQDPQTCKCCKNTDSRCK
ARQLELNERTCRCDKPRR

Endotoxin:

<0.5 EU/ μ g, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O at 100 μ g/ml.

Storage:

Lyophilized recombinant human Vascular Endothelial Growth Factor A165 (rhVEGF-A165) remains stable up to 12 months at -80 °C from date of receipt. Upon reconstitution, rhVEGF-A165 should be stable up to 4 weeks at 4 °C or up to 6 months at -20 °C.

Usage:

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