

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant VEGF164, Mouse (P. pastoris-expressed)

Catalog Number: BK0350-20µg

Source: P. pastoris

Quantity: 20µg

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 mouse Vascular Endothelial Growth Factor A164 (rmVEGF-A164) produced in *Pichia pastoris* is a disulfide-linked homodimer containing two polypeptide chains of 165 amino acids each. A fully biologically active molecule, rmVEGF-A164 has a molecular mass of 39kDa analyzed by non-reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript

Molecular Weight:

39kDa, observed by non-reducing SDS-PAGE.

Purity:

> 97% as analyzed by reducing SDS-PAGE

Biological Activity:

Resuspend cells in assay media (Earle Salts 199X Gibco #11150, without h-EGF) containing 10 % HI-FBS and transfer 100 ul/well to assay plate (5,100 cells/well passage#2). Serial dilute murine VEGF in assay media containing 10 % HI-FBS and transfer 100ml/well to cells in assay plate. Final assay volume is 200 ml/well, containing 10 % HI-FBS, and murine VEGF as indicated 89 hours. Add 20 ml of Promega Substrate Cell Titer 96 Aqueous One Solution Reagent to each well, Incubate 37 °C and read at OD 490 nm.

The ED50 for the effect is typically 4.1 - 6.2 ng/ml.

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:

MAPTTEGEQKSHE-
SHE-
VIKFMDVYQRSYCRPIETLVDIFQEYPDEIEYIFKP
SCVPLMRCAGCCNDEALECVPTSESNITMQIM-
RIKPHQSQHIGEMSFLQHSRCECRPKKDRTK-
PEKHCEPCSERRKHLFVQDPQTCKCCKNTDSR
CKARQLELNERTCRCDKPRR

Endotoxin:

<1.0 EU/µg, determined by LAL method.

Reconstitution:

Reconstituted in ddH2O at 100 µg/ml.

Storage:

Lyophilized recombinant mouse Vascular Endothelial Growth Factor A164 (rmVEGF-A164) remains stable up to 12 months at -80 °C from date of receipt. Upon reconstitution, rmVEGF-A164 should be stable up to 4 week at 4 °C or up to 6 months at -20 °C.

Usage:

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