DATASHEET
Version 20181206

VEGF164, Mouse (P. pastoris-expressed)

Cat. No.: Z02690-1

Size: 1.0 mg

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 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

Amino Acid Sequence:

```
00001 MAPTTEGEQK SHEVIKFMDV YQRSYCRPIE TLVDIFQEYP
00041 DEIEYIFKPS CVPLMRCAGC CNDEALECVP TSESNITMQI
00081 MRIKPHQSQH IGEMSFLQHS RCECRPKKDR TKPEKHCEPC
00121 SERRKHLFVQ DPQTCKCSCK NTDSRCKARQ LELNERTCRC
00161 DKPRR
```

Source: *P. pastoris*

Species: Mouse

Biological Activity: ED_{50} <6.0 ng/ml, measured by the dose-dependent stimulation of the proliferation of HUVEC cells, corresponding to a specific activity of > 1.7x 10^5 units/mg.

Molecular Weight: 39kDa, 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: > 97% as analyzed by reducing SDS-PAGE

Endotoxin Level: <1.0 EU/µg, determined by LAL method.

Storage: Lyophilized recombinant mouse Vascular Endothelial Growth Factor A164 (rmVEGF-A164)remains stable up to 12 months at lower than -70°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.

GenScript USA, Inc.
860 Centennial Ave. Piscataway, NJ 08854
Tel: 1-877-436-7274; 1-732-885-9188