

## **Recombinant Human Vascular Endothelial Growth Factor**<sub>165</sub>

(rhVEGF<sub>165</sub>)

Catalog Number: 105-05

**Description** 

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, VEGF plays a prominent role in normal and pathological angiogenesis. Substantial evidence implicates VEGF in the induction of tumor metastasis and intra-ocular neovascular syndromes. 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.

**Synonyms** 

AA Sequence APMAEGGQN HHEVVKFMDV YQRSYCHPIE TLVDIFQEYP DEIEYIFKPS

CVPLMRCGGC CNDEGLECVP TEESNITMQI MRIKPHQGQH IGEMSFLQHN KCECRPKKDR ARQENPCGPC SERRKHLFVQ DPQTCKCSCK NTDSRCKARQ

LELNERTCRC DKPRR

**Source** Escherichia coli

Molecular Weight Approximately 38.2 kDa disulfide-linked homodimeric protein consisting of two 165 amino

acid polypeptide chains.

**Purity** >95% by SDS-PAGE and HPLC analyses.

**Biological Activity** Fully biologically active. The ED<sub>50</sub> is 1-8ng/ml, as determined by HUVEC cell proliferation.

**Physical Appearance** White lyophilized powder.

**Formulation** Lyophilized from a 0.2µm filtered solution in PBS, pH 7.4.

**Endotoxin**  $< 1EU/\mu g$  of growth factor as determined by LAL method.

**Reconstitution** Reconstitute in sterile distilled water containing 0.1% BSA to a concentration of 0.1-1.0

mg/mL.

Storage Storage Store at -20°C after receiving. Upon reconstitution, store at 2-8°C for up to one week. For

maximal stability, aliquot and store at -20°C. Avoid repeated freeze/ thaw cycles.

**Usage** This product is for research use only. It is not approved for use in humans, animals, or *in vitro* 

diagnostic procedures.