Recombinant Human Vascular Endothelial Growth Factor $_{165}$ (rHuVEGF$_{165}$)

PrimeGene Technical DataSheet

Catalog Number:	105-05
Source:	*Escherichia coli*
Molecular Weight:	Approximately 19.2 kDa on SDS-PAGE under reducing conditions, containing 166 amino acids, and a molecular mass about 38.6 kDa homodimer under non-reducing conditions.
Size:	10 μg/100 μg/500 μg/1 mg
AA Sequence:	MAPMAEGGGQ NHHEVVKFMD VYQRSYCHPI ETLVDIFQEY PDEIEYIFKP SCVPLMRCGG CCNDEGLECV PTEESNITMQ IMRIKPHQGQ HIGEMSFLQH NKCECRPKKD RARQENPCGP CSERRKHLFV QDPQTCKCSC KNTDSRCKAR QLELNERTCR CDKPRR
Purity:	> 95% by SDS-PAGE analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED_{50} as determined by a cell proliferation assay using human umbilical vein endothelial cells (HUVEC) is between 1.0-8.0 ng/ml.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 μm filtered concentrated solution in PBS, with 0.02% Tween-20, pH 7.0.
Endotoxin:	Less than 0.1 EU/μg of rHuVEGF$_{165}$ as determined by LAL method.
Reconstitution:	Prior to opening, it is recommended to centrifuge the vial briefly to bring the contents down the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-0.33 mg/mL. If animal-origin-free condition is expected in your product, then sterile distilled water is recommended. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.
Shipping:	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage:	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● A minimum of 12 months from date of receipt, when stored at ≤ -20 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 3 months, -20 to -70 °C under sterile conditions after reconstitution.
Usage:	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory, or further evaluation purposes. **NOT FOR HUMAN USE**.

Human Vascular Endothelial Growth Factor $_{165}$

Vascular Endothelial Growth Factor is a sub-family of growth factors produced by cells, which stimulates vasculogenesis and angiogenesis. VEGF's normal function is to create new blood vessels during embryonic development, new blood vessels after injury, muscle following exercise, and new vessels (collateral circulation) to bypass blocked vessels. Humans express alternately spliced isoforms of 121, 145, 165, 183, 189, and 206 amino acids (a.a.) in length. VEGF production can be induced in cells that are not receiving enough oxygen. VEGF165 appears to be the most abundant and potent isoform, followed by VEGF121 and VEGF189. Recombinant human VEGF165 contains 166 amino acids residues and it is a disulfide-linked homodimer. In addition, it shares 88% a.a. with corresponding regions of mouse and rat, 96% with porcine, 95% with canine, and 93% with feline, equine and bovine VEGF, respectively.

Shanghai PrimeGene Bio-Tech Co., Ltd.
Website: www.primegene.com.cn
Tel: +86 21 52380373
Website: www.primegene.com
Fax: +86 21 61077348
Email: info.pg@bio-techne.com