Recombinant Murine Vascular Endothelial Growth Factor $_{164}$ (rMuVEGF$_{164}$)

Technical Data Sheet

Catalog Number:	RC236-18+A239
Source:	*Escherichia coli.*
Molecular Weight:	Approximately 38.8 kDa, a disulfide-linked homodimeric protein consisting of two 165 amino acid polypeptide chains with Met at N-terminus.
Quantity:	10µg
AA Sequence:	MAPTTEGEQK SHEVIKFMDV YQRSYCRPIE TLVDIFQEYP DEIEYIFKPS CVPLMRCAGC CNDEALECVP TSESNITMQI MRIKPHQSQH IGEMSFLQHS RCECRPKKDR TKPEKHCEPC SERRKHLFVQ DPQTCKCSCK NTDSRCKARQ LELNERTCRC DKPRR
Purity:	> 95 % by SDS-PAGE and HPLC 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 less than 5 ng/ml, corresponding to a specific activity of > 2.0×10^5 IU/mg.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 µm filtered solution in PBS, pH 7.4.
Endotoxin:	Less than 1 EU/µg of rMuVEGF$_{164}$ as determined by LAL method.
Reconstitution:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. 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 at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage:	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °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 BioBasic Inc. for research, laboratory or further evaluation purposes. **NOT FOR HUMAN USE**.

Murine Vascular Endothelial Growth Factor $_{164}$

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. Mouse and rat express alternately spliced isoforms of 120, 164, and 188 amino acids (a.a.) in length. Recombinant mouse VEGF164 contains 165 amino acids residues and it is a disulfide-linked homodimer. In addition, it shares 97 % a.a. sequence identity with corresponding regions of rat, 89 % with human and porcine, 88 % with bovine, and 90 % with feline, equine and canine VEGF, respectively.