

Recombinant Murine Vascular Endothelial Growth Factor 120

#R00003

Size: 10 µg/100 µg/500 µg

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.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

Vascular Endothelial Growth Factor is a sub-family of growth factors produced by cells that 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. 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. Mouse express alternately spliced isoforms of 120, 164, 182 amino acids (a.a.) in length. The VEGF120 shares 98 % a.a. sequence identity with corresponding regions of rat, 89 % with canine, feline, equine and porcine, and 87 % with human, ovine and bovine VEGF, respectively.

AA Sequence

MAPTTEGEQKSHEVIKFMDVYQRSYCRPIETLVDIFQ

EYPDEIEYIFKPSCVPLMRCAGCCNDEALECVPTSES
NITMQIMRIKPHQSQHIGEMSFLQHSRCECRPKKDRT
KPEKCDKPRR

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.

Product Specification

Synonyms	Vascular endothelial growth factor isoform 120
Accession	Q00731
Unigene	Mm.282184.
Species	Murine
Source	Escherichia coli.
Molecular Weight	Approximately 28.4 kDa, a disulfide-linked homodimeric protein consisting of two 121 amino acid polypeptide chains with Met at N-terminus.
Purity	> 96 % 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 $> 2.0 \times 10^5$
IU/mg.

Physical	Sterile Filtered White lyophilized
Appearance	(freeze-dried) powder.
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS, pH 7.4.
Endotoxin	Less than 1 EU/ μ g of rMuVEGF120 as determined by LAL method.
