

Recombinant Mouse VEGFA protein

Cat. No. VEGFA-47M Lot. No. (See product label)

SPECIFICATION

Product Overview Recombinant Mouse VEGFA protein(121 a.a.) was expressed in Escherichia coli.

Species Mouse

Source E.coli

ProteinLength 121

Description

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.

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

Bio-activity

Fully biologically active when compared to standard. The ED50 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.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Molecular Mass	Approximately 28.4 kDa, a disulfide-linked homodimeric protein consisting of two 121 amino acid polypeptide chains with Met at N-terminus.
AA Sequence	MAPTTEGEQKSHEVIKFMVDVYQRSYCRPIETLVDIFQEYPDEIEYIFKPSCVPLMRCA GCCNDEALECVPTSESNITMQIMRIKPHQSQHIGEMSFLQHSRCECRPKKDRTKPE KCDKPRR
Endotoxin	Less than 1 EU/μg of rMuVEGF120 as determined by LAL method.
Purity	>96% by SDS-PAGE and HPLC analysis.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
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 centigrade. Further dilutions should be made in appropriate buffered solutions.

GENE INFORMATION

Gene Name	VEGFA
Official Symbol	VEGFA
Synonyms	VEGFA; vascular endothelial growth factor A; vascular permeability factor; Vpf; Vegf; Vegf120; Vegf164; Vegf188;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

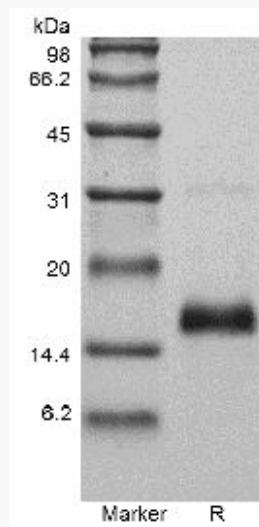
Gene ID 22339

mRNA Refseq NM_001025250

Protein Refseq NP_001020421

UniProt ID Q00731

**SDS-PAGE of
VEGFA-47M**



 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA