

## Product Information

Contents: Carrier-Free Recombinant Mouse VEGF (Vascular endothelial growth factor)

Catalog Number: 34-8351

Sizes: 100 ug, 500 ug

Formulation: 50mM Acetate, 0.1M NaCl, pH 5 with no carriers or preservatives. 0.22 µm filtered.

Storage Conditions: For greatest stability, keep concentration of primary stock at or above 10 µg/ml. For long term storage, aliquot into polypropylene vials (volumes of 20 µl or greater) and store at or below -80°C. Avoid repeated freeze/thaw cycles.

Handling Conditions: For best recovery, always quick-spin vial prior to opening. For dilution of current stock, always include carrier protein (1% BSA or 10% FBS) in the buffered saline diluent.

Source: E. coli expressed amino acids ala 27-arg 146 of mature mouse VEGF120 (accession # S38100).

Molecular Mass: The protein is not methionylated at the N-terminal and has a predicted molecular mass of 14,071. The DTT reduced protein migrates as a 14 kDa polypeptide on SDS-PAGE. The cystine-linked homodimer migrates as a 28 kDa protein on non-reduced SDS-PAGE.

Purity: Greater than 98% as determined by SDS-PAGE

Endotoxin Level: Less than 0.01 ng/ug cytokine as determined by the LAL assay.

### Available Formats of This Product

| Cat. No. | Format   | Excite (nm) | Emit (nm) | Reported Applications |
|----------|--|-------------|-----------|-----------------------|
| 14-8351  | Mouse VEGF120 Recombinant Protein              | N/A         | N/A       | BA                    |
| 34-8351  | Mouse VEGF120 Recombinant Protein Carrier-Free | N/A         | N/A       | BA                    |

### Flow Cytometry Product Notes:

Test Sizes: To accommodate multicolor flow cytometry, eBioscience is in the process of reducing test size volumes from 20 µl to 5 µl. Please check your antibody vial for the recommended test size.

Fluorochrome Replacements: eBioscience is in the process of replacing all Pacific Blue® and APC-Alexa Fluor® 750 conjugated products with eFluor™ 450 and APC-eFluor™ 780 conjugated products, respectively.

### Custom Product Requests

Need a custom product? Download the Custom Product Request Form and submit completed form to [customs@ebioscience.com](mailto:customs@ebioscience.com).

Questions? Please consult our answers to frequently asked questions at <http://www.ebioscience.com/faq>.

## Description

Vascular endothelial growth factor (VEGF), also called vascular permeability factor (VPF), is produced by cultured vascular smooth muscle cells. From analysis of transcripts from these cells by PCR and cDNA cloning, 3 different forms of the VEGF coding region have been identified. These cDNAs had predicted products of 189, 165, and 121 amino acids. VEGF is a mitogen primarily for vascular endothelial cells. It is structurally related to platelet-derived growth factor. VEGF, a homodimeric glycoprotein of relative molecular mass 45,000, is the only mitogen that specifically acts on endothelial cells. The VEGF receptor, Flk1, is exclusively expressed in endothelial cells. VEGF may be a major regulator of tumor angiogenesis in vivo.

## Applications Reported

For research use only, not for diagnostic or therapeutic use.

## References

- Tischer, E., et al. 1991. The human gene for vascular endothelial growth factor: multiple protein forms are encoded through alternative exon splicing. *J. Biol. Chem.* 266: 11947-11954.
- Millauer, B., et al. 1994. Glioblastoma growth inhibited in vivo by a dominant-negative Flk-1 mutant. *Nature* 367: 576-579.
- Folkman, J. 1995. Angiogenesis in cancer, vascular, rheumatoid and other disease. *Nature Med.* 1: 27-31.

