

## 32-8003: Recombinant Mouse VEGF-A/VEGF164(Discontinued)

**Gene :** Vegfa  
**Gene ID :** 22339  
**Uniprot ID :** Q00731

### Description

Source: E. coli.  
MW :19.27kD.

Recombinant Mouse Vascular Endothelial Growth Factor A is produced by our Yeast expression system and the target gene encoding Ala27-Arg190 is expressed. Mouse Vascular endothelial growth factor (VEGF or VEGFA), is a potent mediator of both angiogenesis and vasculogenesis in the fetus and adult. It is a member of the PDGF/VEGF growth factor family that is characterized by a cystine knot structure formed by eight conserved cysteine residues. Alternately spliced isoforms of 120, 164 and 188 aa found in mouse. VEGF binds the type I transmembrane receptor tyrosine kinases VEGF R1 (also called Flt1) and VEGF R2 (Flk/KDR) on endothelial cells. Although affinity is highest for binding to VEGF R1, VEGF R2 appears to be the primary mediator of VEGF angiogenic activity. VEGF is required during embryogenesis to regulate the proliferation, migration, and survival of endothelial cells. It may play a role in increasing vascular permeability during lactation, when increased transport of molecules from the blood is required for efficient milk protein synthesis.

### Product Info

**Amount :** A/VEGF164 / 50 µg  
**Content :** Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.  
**Storage condition :** Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.  
**Amino Acid :** APTTEGEQKSHEVIKFMDDVYQRSYCRPIETLVDIFQEYYPDEIEYIFKPSCVPLMRCAGCCNDEALEC  
VPTSESNITMQIMRIKPHQSQHIGEMSFLQHSRCECRPKKDRTKPENHCEPCSEERRKHLFVQDPQ  
TCKCSCKNTDSRCKARQLELNERTCRCDKPRR

### Application Note

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 µg/ml. Dissolve the lyophilized protein in ddH<sub>2</sub>O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

**Endotoxin :** Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.

**Biological Activity :**  
Measured in a cell proliferation assay using HUVEC human umbilical vein endothelial cells. The ED<sub>50</sub> for this effect is typically 1-4 ng/mL, Corresponding to a specific activity of ? 2.5 x 10<sup>5</sup> units/mg.