

RECOMBINANT MOUSE VASCULAR ENDOTHELIAL GROWTH FACTOR (mVEGF)

Catalog # 02753
Catalog # 02953

5 mg per vial
25 mg per vial

PRODUCT DESCRIPTION:

Vascular endothelial growth factor (VEGF), also known as vasculotropin, is a potent mitogen for vascular endothelial cells that induces angiogenesis. VEGF promotes vascularization of tumors and inhibition of VEGF activity can suppress tumor growth *in vivo*. Recently, it has been found that VEGF has a key role in stem cell movements. It regulates the development of erythroid and other hemopoietic lineages from a common precursor and Flk1/KDR, the receptor tyrosine kinases for VEGF, are expressed on endothelial cells, primitive hemopoietic stem cells, monocytes and erythroleukaemia cells. The disulfide-linked homodimeric recombinant mouse VEGF, (consisting of two 164 amino acid residue subunits) is glycosylated and migrates as a 42 kDa protein in SDS-PAGE under non-reducing conditions.

SOURCE:

A DNA sequence encoding the mouse VEGF protein sequence was expressed in *Sf* 21 insect cells using a baculovirus expression system.

PURITY:

Greater than 97%, as determined by SDS-PAGE and visualized by silver stain. Endotoxin level was less than 0.1 ng per 1 µg of the cytokine as determined by the LAL method.

FORMULATION:

Lyophilized from a 0.2 µm filtered solution in PBS containing 50 µg of bovine serum albumin per 1 µg of cytokine.

RECONSTITUTION:

It is recommended that sterile PBS containing at least 0.1% human serum albumin or bovine serum albumin be added to the vial to prepare a stock solution of no less than 5 µg/mL.

STABILITY/STORAGE:

Lyophilized samples are stable for greater than six months at -20°C to -70°C.

Reconstituted mVEGF can be stored under sterile conditions at 2°C to 4°C for one month or at -20°C to -70°C for three months without detectable loss of activity.

Avoid repeated freeze-thaw cycles.

ACTIVITY:

Activity was determined by the ability to stimulate ³H-thymidine incorporation in HUVE cells and the ED₅₀ for this effect was typically 2 - 4 ng/mL.

**THIS REAGENT IS FOR RESEARCH USE ONLY.
IT IS NOT TO BE ADMINISTERED TO HUMANS.**