



Vascular Endothelial Growth Factor, His Tag, mouse recombinant (rmVEGF-His)

Catalog No: 97294
Lot No: XXXXX
Source: *E. coli*
Synonyms: Vascular endothelial growth factor A, VEGF-A, Vascular permeability factor, VPF, VEGF, Vegf120, Vegf164, Vegf188, Vegfa

Background

Vascular endothelial growth factor is an important signaling protein involved in both vasculogenesis and angiogenesis. As its name implies, VEGF activity has been mostly studied on cells of the vascular endothelium, although it does have effects on a number of other cell types (e.g. stimulation monocyte/macrophage migration, neurons, cancer cells, kidney epithelial cells). VEGF mediates increased vascular permeability, induces angiogenesis, vasculogenesis and endothelial cell growth, promotes cell migration, and inhibits apoptosis. In vitro, VEGF has been shown to stimulate endothelial cell mitogenesis and cell migration. VEGF is also a vasodilator and increases microvascular permeability and was originally referred to as vascular permeability factor. Elevated levels of this protein is linked to POEMS syndrome, also known as Crow-Fukase syndrome. Mutations in this gene have been associated with proliferative and nonproliferative diabetic retinopathy.

Description

VEGF mouse recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 141 amino acids (205-324) and having a total molecular mass of 16.3 kDa. Mouse VEGF is fused to 20 amino acid His Tag at N-terminus and purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered colorless solution.

Formulation

Mouse VEGF contains 20 mM Tris-HCl buffer (pH8.0) and 10% glycerol.

Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Purity

Greater than 90.0% as determined by SDS-PAGE.

Amino Acid Sequence

MGSSHHHHHH SGLVPRGSH MAPTTEGEQK SHEVIKFMDV YQRSYCRPIE TLVDIFQEYP DEIEYIFKPS CVPLMRCAGC
CNDEALECVP TSESNITMQI MRIKPHQSQH IGEMSFLQHS RCECRPKKDR TKPEKCDKPR R

Activity

Measured in a cell proliferation assay using NIH-3T3 mouse embryonic fibroblast. The ED50 for this effect is 0.5 - 1.5 ng/ml.

CONTACT US TODAY

BIOMOL GmbH • Kieler Straße 303a • 22525 Hamburg • Germany • info@biomol.de • www.biomol.de

Fon: +49 (0)40-853 260 0 • TOLL FREE IN GERMANY: Fon: 0800-246 66 51



Usage

This product is offered by Biomol for research purposes only. Not for diagnostic purposes or human use. It may not be resold or used to manufacture commercial products without written approval of Biomol GmbH.

CONTACT US TODAY

BIOMOL GmbH • Kieler Straße 303a • 22525 Hamburg • Germany • info@biomol.de • www.biomol.de

Fon: +49 (0)40-853 260 0 • TOLL FREE IN GERMANY: Fon: 0800-246 66 51