Vascular Endothelial Growth Factor (121 a.a.), Basic (Human Recombinant)

Cell Culture Reagents-Growth Supplements

Catalogue Number: CC108

Description: 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/ macrophagemigration, 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 mitogenesisand 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 are linked to POEMS syndrome, also known as Crow-Fukase syndrome. Mutations in this gene have been associated with proliferative and nonproliferative diabetic retinopathy. Vascular Endothelial Growth Factor-121 Human Recombinant produced in E.Coli is a double, non-glycosylated, polypeptide chain containing 121 amino acids and having a molecular mass of 28423 Dalton. VEGF121 circulates more freely than other VEGF forms, which bind more tightly with vascular heparin sulfates. The VEGF-121 is purified by proprietary chromatographic techniques.

Source: Escherichia Coli.

Physical Appearance: Sterile Filtered Clear Solution.

Formulation: 10ug/ml solution in 10mM sodium phosphate buffer (pH=8.0) with 0.1% BSA added as stabilizer.

Stability: bFGF should be stored at 4°C between 2-7 days and for future use below -20°C. Please avoid freeze-thaw cycles.

Suitability: Cell culture tested

Purity: Greater than 98.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

Biological Activity: Determined by the dose-dependent stimulation of the proliferation of human umbilical vein endothelial cells (HUVEC) using a concentration range of 0.2-0.4 ng/ml.

Amino acid sequence:

APMAEGGGQNHHEVVKFMDVYQRSYCHPIETLVDIFQEYPDEIEYIFKPSCVPLMRCGGCCNDEGLECVPTEESNITMQIMRIKPHQGQHIG
EMSFLQHNKCECRPKKDRARQENCDKPRR

Catalogue Number	*Description*	*Protein Conc.*	*Pack Size*
CC108-1UG	VEGF121 (basic)	10 ug/mL	100 uL
CC108-10UG	VEGF121 (basic)	10 ug/mL	1 mL