9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

VEGF Human, HEK

Vascular Endothelial Growth Factor Human Recombinant, HEK
GRF0413

Product Overview

Name	VEGF Human, HEK

Description

Vascular Endothelial Growth Factor Human Recombinant, HEK

Accession (Primary)	P15692

Synonyms

Vascular endothelial growth factor A, VEGF-A, Vascular permeability factor, VPF, VEGF, MGC70609.

Introduction

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.

Source

HEK293 (Human Embryonic Kidney cell line).

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation

The protein was lyophilized from a 0.2 μM filtered solution of 20mM PB, 150mM NaCl, pH 7.2.

Stability

Lyophilized Vascular Endothelial Growth Factor HEK although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution VEGF HEK should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity

9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

Greater than 95.0% as determined by SDS-PAGE.

Amino acid sequence

APMAEGGGQN HHEVVKFMDV YQRSYCHPIE TLVDIFQEYP DEIEYIFKPS CVPLMRCGGC CNDEGLECVP TEESNITMQI MRIKPHQGQH IGEMSFLQHN KCECRPKKDR ARQENPCGPC SERRKHLFVQ DPQTCKCSCK NTDSRCKARQ LELNERTCRC DKPRR.

Biological Activity

Determined by the dose-dependent stimulation of the proliferation of human umbilical vein endothelial cells (HUVEC) using a concentration range of 4.0ng/ml, corresponding to a specific activity of 2.5 x 10 5 Units/mg.

Solubility

It is recommended to reconstitute the lyophilized Vascular Endothelial Growth Factor-HEK in sterile 18M-cm H2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Precautions

VEGF Human, HEK is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P15692)