

# VEGF Human, His

*Vascular Endothelial Growth Factor Human Recombinant, His  
GRF0414*

## Product Overview

Name VEGF Human, His

### Description

Vascular Endothelial Growth Factor Human Recombinant, His

Accession (Primary) [P15692](#)

### Synonyms

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

### Introduction

Vascular endothelial growth factor (VEGF) is an important signaling protein involved in vessel formation. 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 vasculogenesis and endothelial cell production, 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. VEGF is located in normal cartilage though only osteoarthritic cartilage expresses the VEGF receptors, NP1, VEGFR1 and VEGFR2. The VEGF level in the culture media from OA chondrocytes was more than 3 folds higher than in media from normal chondrocytes.

### Source

Rice Grain

### Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

### Formulation

The VEGF protein was lyophilized from a concentrated (1mg/ml) solution with no additives.

### Stability

Lyophilized VEGF although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution VEGF 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

Greater than 95.0% as determined 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 10ng/ml, corresponding to a Specific Activity of 100,000IU/mg

**Solubility**

It is recommended to reconstitute the lyophilized VEGF in sterile 18M-cm H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

**Precautions**

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

**Target Information: ( [P15692](#) )**

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