

VEGF121

Catalog # PVGS1331

Specification

VEGF121 - Product Information

Primary Accession
Species
Human

P15692-9

Sequence

Pro28-Arg147, expressed with an N-terminal Met

Purity

> 95% as analyzed by SDS-PAGE
br>> 95% as analyzed by HPLC

Endotoxin Level

< 0.2 EU/ μg of protein by gel clotting method

Biological Activity

ED₅₀ < 5.0 ng/ml, measured by a cell proliferation assay using HUVEC Cells, corresponding to a specific activity of $> 2.0 \times 10$ ⁵ units/mg.

Expression System

E. coli

Formulation

Lyophilized after extensive dialysis against PBS.

Reconstitution

It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH₂O or PBS up to 100 µg/ml.

Storage & Stability

Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

VEGF121 - Additional Information

Target Background

VEGF-A121 is one of five isoforms (121, 145, 165, 189, and 206) of VEGF protein, a cytokine belonging to the Platelet Differentiation Growth Factor (PDGF) family, and existing as a disulfide-linked homodimeric glycoprotein. In contrast to the longer isoforms, VEGF-A121 is more freely diffusible, and cannot bind to heparin. In vivo, VEGF is expressed predominantly in lung, heart, kidney, and adrenal glands, and the expression of VEGF is up-regulated by a number of growth factors, including PDGF, Fibroblast Growth Factor (FGF), Epidermal Growth Factor (EGF), and Tumor Necrosis Factor (TNF). VEGF signals via binding to two tyrosine kinase receptors: the Fms-like tyrosine kinase 1 (Flt-1) and the kinase domain receptor (KDR). VEGF is a specific mitogen and survival factor, contributing to abnormal angiogenesis and cancer development.

VEGF121 - Protein Information

VEGF121 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

VEGF121 - Images