3050 Spruce Street, St. Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

Product Information

HumaPro™ Vascular Endothelial Growth Factor 121 human, recombinant expressed in HEK 293 cells

Catalog Number **H9041**
Storage Temperature –20 °C

Synonym: VEGF-121

Product Description

HumaPro™ VEGF-121 is expressed in human 293 cells as a disulfide linked, glycosylated cytokine with an apparent molecular mass of 37 kDa as a homodimer and 50 kDa as a homotrimer. Production in human 293 cells offers authentic glycosylation. Glycosylation contributes to stability in cell growth media and other applications.

VEGF121 belongs to the PDGF/VEGF growth factor family. Many cell types secrete VEGF, and it is a potent angiogenic factor and mitogen that stimulates proliferation, migration, and formation of endothelial cells. VEGF stimulates permeabilization of blood vessels and is present in some tumors of the nervous system. VEGF is induced by hypoxia, oncogene mutations, and cytokines such as IL-1, IL-8, and TNF-α.

This product is lyophilized from a PBS solution.

ED_{50}: ≤16 ng/mL

The specific activity was determined by the dose-dependent stimulation of the proliferation of HUVEC cells (Human Umbilical Vein Endothelial Cells).

Purity: ≥95% (SDS-PAGE)

Endotoxin level: ≤1 EU/µg

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein in sterile PBS containing 0.1% endotoxin-free recombinant human serum albumin

Storage/Stability

Store the product at –20 °C. The lyophilized product remains active for one year at –20 °C.

Upon reconstitution, the cytokine can be stored at 2–8 °C for short term only, or at –20 °C to –80 °C in aliquots for long term. Avoid repeated freeze-thaw cycles.

References

1. Conn, G., et al., PNAS, **87**, 1323-1327 (1990).
2. Neufeld, G., et al., FASEB Journal, **13**, 9-22 (1999).

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