



Recombinant Human VEGF-121
(Vascular Endothelial Growth Factor-121)

Catalog Number: 100-116
Accession Number: P15692-9

Specifications and Uses:

Alternate Names: VEGF-A, VPF, glioma-derived endothelial cell mitogen

Description:

Vascular Endothelial Growth Factor-A (VEGF-A) was originally isolated from tumor cells and is produced by a wide variety of cell types. In addition to stimulating vascular growth and vascular permeability, VEGF-A may play a role in stimulating vasodilation via nitric oxide-dependent pathways. VEGF-A has several variants, one being VEGF-121. Rat and bovine VEGF are one amino acid shorter than the human factor, and the bovine and human sequences show a homology of 95%. Recombinant human VEGF-121 is a non-glycosylated homodimer, containing two 121 amino acid chains, with a total molecular weight of 28.4 kDa.

Source: *E.coli*

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation and Stability:

Recombinant human VEGF 121 is lyophilized with no additives.

Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/mL, which can be further diluted into other aqueous solutions.

Protein Content and Purity (typically ≥ 95%) determined by:

HPLC, Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm

Endotoxin Level:

Measured by kinetic LAL analysis and is typically ≤ 1 EU/μg protein.

Biological Activity:

The activity is determined by the dose-dependent proliferation of HUVECs and is typically 1-6 ng/mL.

AA Sequence:

APMAEGGGQN HHEVVKFMDV YQRSYCHPIE TLVDIFQEYP DEIEYIFKPS CVPLMRCGGC CNDEGLECVPT
TEESNITMQI MRIKPHQGQH IGEMSFLQHN KCECRPKKDR ARQENCDKPR R

THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!

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