

BACKGROUND:

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 vasodilatation via nitric oxide-dependent pathways. VEGF-A has several variants, VEGF-165 being the most abundant. 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 165 is a non-glycosylated homodimer, containing two 165 amino acids and having a total molecular mass of 38.2 kDa.

Cat. No.:
RP1044

Alternate Names:

VEGF-A, VPF, glioma-derived endothelial cell mitogen

AA Sequence:

MAPMAEGGGQN	HHEVVKFMDV	YQRSYCHPIE
TLVDIFQEYP	DEIEYIFKPS	CVPLMRCGGC
CNDEGLECVP	TEESNITMQI	MRKPHQGQH
IGEMSFLQHN	KCECRPKKDR	ARQENPCGPC
SERRKHLFVQ	DPQTCKCSCK	NTDSRCKARQ
LELNERTCRC	DKPRR	

TECHNICAL INFO

Source:

E. coli

Physical Appearance:

Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:

0.1% Trifluoroacetic Acid (TFA)

Stability:

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 0.1 mg/mL, which can be further diluted into other aqueous solutions.

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm.
- RP-HPLC calibrated against a known standard.
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Biological Activity:

The activity is measured by dose-dependent HUVEC proliferation, with Bioactivity Acceptance Criteria ED50 at 10 ng/mL.

