Recombinant Rat VEGF-165

(Vascular Endothelial Growth Factor-165)

Catalog Number: 300-31

Accession Number: AAL07526.1

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 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 rat VEGF-165 is a disulfide linked homodimer, containing two 165 amino acids chains, with a total molecular weight of 38.8 kDa.

Source: *E.coli*

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

Formulation and Stability:
Recombinant rat VEGF-165 is lyophilized with from 10 mM Na_2PO_4, pH 7.5.
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 ≥ 97%) 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 induced proliferation of Human umbilical vein endothelial cells (HUVECs) and is typically 4.0-8.0 ng/mL.

AA Sequence:
MAPTTEGEQK AHEVVKFMDV YQRSYCRPIE TLVDIFQEYP DEIEYIFKPS CVPLMRCAGC CNDEALECVP TSESNVTMQI MRIKPHQSQH IGEMSFLQHS RCECRPKKDR TKPEKHCEPC SERRKHLFVQ DPQTCKCSCK NTDSRCKARQ LELNERTCRC DKPRR

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

Gentaur Molecular Products
Voortstraat 49
1910 Kampenhout, Belgium