

Recombinant human VEGF 121/VEGFA protein

Catalog Number: ATGP0282

PRODUCT INFORMATION

Expression system

E.coli

Domain

207-327aa

UniProt No.

P15692

NCBI Accession No.

NP_001020541.2

Alternative Names

Vascular endothelial growth factor A isoform f, Vascular permeability factor, VPF, VEGF

PRODUCT SPECIFICATION

Molecular Weight

14.2 kDa (122aa) confirmed by MALDI-TOF

Concentration

0.5mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10 % glycerol

Purity

> 95% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity

Measured in a cell proliferation assay using HUVEC human umbilical vein endothelial cells. The ED50 range \leq 4ng/ml.

Tag

Non-Tagged

Application

SDS-PAGE, Bioactivity

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Recombinant human VEGF 121/VEGFA protein

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Description

Vascular endothelial growth factor (VEGF) is homodimeric, heparin-binding glycoprotein involved in both angiogenesis and vasculogenesis. VEGF is expressed as multiple alternately spliced isoforms of VEGF121, 165, 189 and 206. VEGF binds to the receptor tyrosine kinases VEGF R1 (Flt-1) and VEGF R2 (KDR/Flk-1) to activate signal transduction and regulate both physiological and pathological angiogenesis. Recombinant VEGF121 protein was expressed in E. coli and purified by conventional chromatography, after refolding of the isolated inclusion bodies in a renaturation buffer.

Amino acid Sequence

MAPMAEGGGQ NHHEVVKFMD VYQRSYCHPI ETLVDIFQEY PDEIEYIFKP SCVPLMRCGG CCNDEGLECV PTEESNITMQ
IMRIKPHQQG HIGEMSFLQH NKCECRPKKD RARQEKCDKP RR

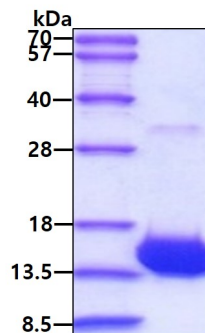
General References

Yasuji ueda., et al. (2004) Cancer Chemother Pharmacol. 54(1):16-24.

Neufeld G., et al. (1999) FASEB J. 13(1):9-22.

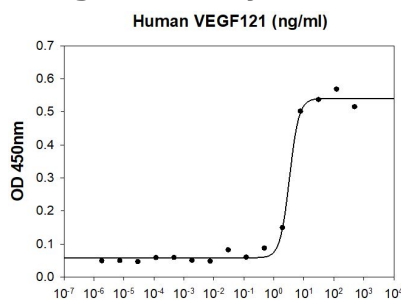
DATA

SDS-PAGE



3 μ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain

Biological Activity



Human VEGF121 stimulates cell proliferation of the HUVEC human umbilical vein endothelial cells. The ED50 range ≤ 4 ng/ml.