

Product: Vascular endothelial growth factor A isoform F (VEGF121, 207-327aa, His), human
Catalog #: 11-VEGF-121H
Amount: 10 µg

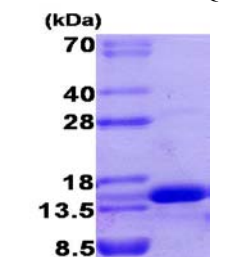
DESCRIPTION: Vascular endothelial growth factor (VEGF) is homodimeric, heparin-binding glycoprotein involved in both angiogenesis and vasculogenesis. VEGF is expressed as multiple alternately spliced isoforms of VEGF121, 165, 189 and 206. VEGF binds to the receptor tyrosine kinases VEGF R1 (Flt-1) and VEGF R2 (KDR/Flk-1) to activate signal transduction and regulate both physiological and pathological angiogenesis.

Synonyms: VPF, VEGF, VEGF-A

NCBI Accession No.: NP_001020541

AA Sequence:

MGSSHHHHHH SGLVPRGSH MAPMAEGGGQ NHHEVVKFMD VYQRSYCHPI ETLVDIFQEY
 PDEIEYIFKP SCVPLMRCGG CCNDEGLECV PTEESNITMQ IMRIKPHQGG HIGEMSFLQH
 NKCECRPKKD RARQEKCDKP RR



15% SDS-PAGE (3µg)

SOURCE: Recombinant, His-tagged, *E. coli* expression system
MOLECULAR WEIGHT: 16.3kDa (142aa)
PURITY: > 95% by SDS PAGE
FORM: Purified, in 20 mM Tris-HCl buffer (pH 8.0)
ENDOTOXIN: < 1.0 EU per 1µg of protein (determined by LAL method)
CONCENTRATION: 1 mg/ml
STORAGE: -20°C (aliquot), Avoid repeated freeze and thaw cycles
BIOLOGICAL ACTIVITY: It was confirmed by the dose-dependent stimulation of the proliferation of NIH/3T3 cells using BrdU incorporation method. The ED50 is typically 2 ~ 8 ng/ml, corresponding to specific activity of 1.25~5 x 10⁵ unit/mg

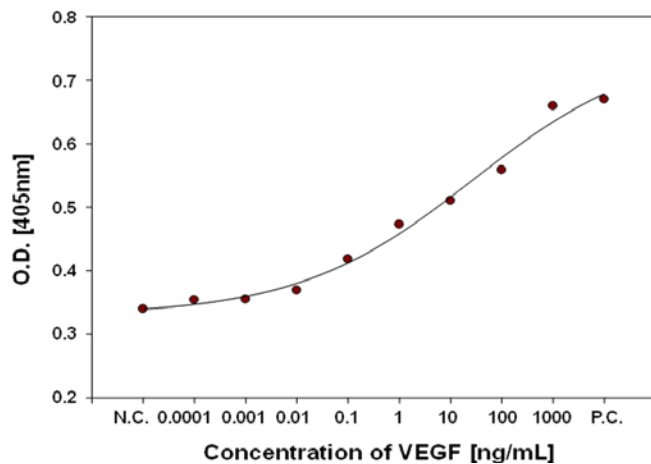
REFERENCE:

Yasuji Ueda., *et al.* (2004) *Cancer Chemother Pharmacol.* **54**(1):16-24
 Neufeld G., *et al.* (1999) *FASEB J.* **13**(1):9-22
 Raines, E.W. *et al.* (1985) *Methods Enzymol.* 109:749-773

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Activity assay

- Cell line: NIH/3T3
- Inoculum : 2X10⁴ cells/100uL/well [96well plate]
- Incubation: 37°C, 5% CO₂, 95% humidity
- Cell starvation: 0.1% FBS media for 24 hrs
- Protein incubation time: 36 hrs
- BrdU incubation time: 16 hrs



NIH/3T3 cell proliferation was determined by BrdU incorporation method at 405 nm. This test was performed duplicate.

N.C.: negative control [only 0.1% FBS]
P.C.: positive control [10% FBS]

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