

APA145Hu01 100µg

Active Vascular Endothelial Growth Factor C (VEGFC)

Organism Species: Homo sapiens (Human)

Instruction manual

FOR IN VITRO USE AND RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1th Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Glu47~Trp413

Tags: N-terminal His-tag

Purity: >92%

Buffer Formulation: 20mM Tris, 150mM NaCl, pH8.0, containing 0.05% sarcosyl and 5% trehalose.

Applications: Cell culture; Activity Assays.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 8.2

Predicted Molecular Mass: 45.3kDa

Accurate Molecular Mass: 45kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCE]

EATA
YASKDLEEQL RSVSSVDELM TVLYPEYWKM YKCQLRKGGW QHNREQANLN
SRTEETIKFA AAHYNTEILK SIDNEWKRTQ CMPREVCIDV GKEFGVATNT
FFKPPCVSVY RCGGCCNSEG LQCMNTSTSY LSKTLFEITV PLSQGPKPVT
ISFANHNTSCR CMSKLDVYRQ VHSIIRSLP ATLPQCQAAN KTCPTNYMWN
NHICRCLAQE DFMFSSDAGD DSTDGFHDIC GPNKELDEET CQCVCRAGLR
PASCOPHKEK DRNSCQCVCCK NKLFPSSQCGA NREFDENTCQ CVCKRTPCRN
QPLNPGKCAC ECTESPQKCL LKGKKFHHQT CSCYRRPCTN RQKACEPGFS
YSEEVCRCPV SYW

[ACTIVITY]

Vascular endothelial growth factor C (VEGFC) is a protein that is a member of the platelet-derived growth factor/vascular endothelial growth factor (PDGF/VEGF) family. It plays key roles in the physiology and pathology of many aspects of the cardiovascular system, including vasculogenesis, hematopoiesis, angiogenesis and vascular permeability. To test the effect of VEGFC on cell proliferation of ECV304 endothelium cell line, cells were seeded into triplicate wells of 96-well plates at a density of 2,000cells/well and allowed to attach overnight, then the medium was replaced with serum-free standard DMEM prior to the addition of various concentrations of VEGFC. After incubated for 72h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10 μ L of CCK-8 solution was added to each well of the plate, then measure the absorbance at 450nm using a microplate reader after incubating the plate for 1-4 hours at 37°C. The dose-effect curve of VEGFC was shown in Figure 1. It was obvious that VEGFC significantly promoted cell proliferation of ECV304 cells. The ED50 for this effect is typically 0.304 to 1.339 μ g/mL.

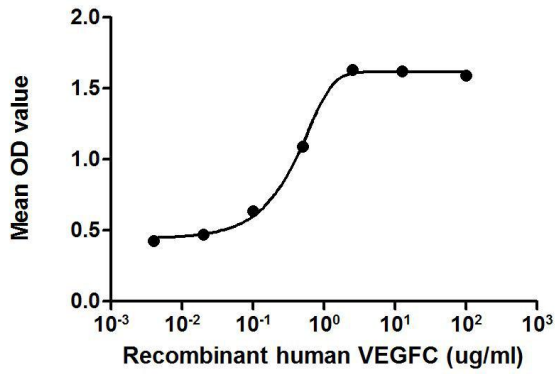


Figure 1. The dose-effect curve of VEGFC on ECV304 cells

[IDENTIFICATION]

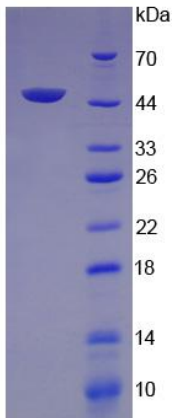


Figure 2. SDS-PAGE

Sample: Active recombinant VEGFC, Human

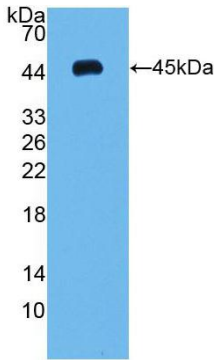


Figure 3. Western Blot

Sample: Recombinant VEGFC, Human;

Antibody: Rabbit Anti-Human VEGFC Ab (PAA145Hu01)