

APB696Hu01 100µg

Active Vascular Endothelial Growth Factor 165 (VEGF165)

Organism Species: *Homo sapiens* (Human)

Instruction manual

FOR RESEARCH USE ONLY

NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Pro28~Arg191

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: 6.9

Predicted Molecular Mass: 20.4kDa

Accurate Molecular Mass: 19kDa 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]

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PMA EGGGQNHHEV VKFMDVYQRS  
YCHPIETLVD IFQEYPDEIE YIFKPSCVPL MRCGGCCNDE GLECVPTees  
NITMQIMRIK PHQGQHIGEM SFLQHNKCEC RPKKDRARQE NPCGPCSERR  
KHLFVQDPQT CKCCKNTDS RCKARQLELN ERTCRCDKPR R
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[ACTIVITY]

Vascular endothelial growth factor 165 is one kind of isoforms of Vascular endothelial growth factor A (VEGFA). This protein is a glycosylated mitogen that specifically acts on endothelial cells and has various effects, including mediating increased vascular permeability, inducing angiogenesis, vasculogenesis and endothelial cell growth, promoting cell migration, and inhibiting apoptosis. Besides, Vascular Endothelial Growth Factor Receptor 1 (VEGFR1) has been identified as an interactor of VEGF165, thus a binding ELISA assay was conducted to detect the interaction of recombinant human VEGF165 and recombinant human VEGFR1.

Briefly, VEGF165 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to VEGFR1-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-VEGF165 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50µL stop solution to the wells and read at 450nm immediately. The binding activity of VEGF165 and VEGFR1 was shown in Figure 1, and this effect was in a dose dependent manner.

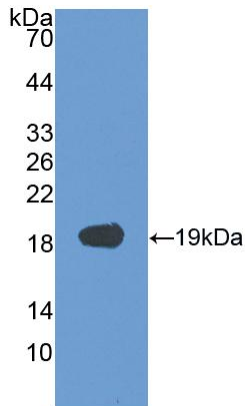


Figure 4. Western Blot

Sample: Recombinant VEGF165, Human;

Antibody: Rabbit Anti-Human VEGF165 Ab (PAB696Hu01)

[IMPORTANT NOTE]

The kit is designed for in vitro and research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.