APA145Rb62 100μg
Active Vascular Endothelial Growth Factor C (VEGFC)
Organism Species: *Oryctolagus cuniculus (Rabbit)*
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[PROPERTIES]

Source: Eukaryotic expression.
Host: 293F cell
Residues: Ala111~Arg226
Tags: N-terminal His-tag
Purity: >90%
Endotoxin Level: <1.0EU per 1μg (determined by the LAL method).
Buffer Formulation: PBS, pH7.4, containing 5% Trehalose .
Original Concentration: 200μg/mL
Applications: Activity Assays.
(May be suitable for use in other assays to be determined by the end user.)
Predicted isoelectric point: 8.5
Predicted Molecular Mass: 14.7kDa
Accurate Molecular Mass: 22kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 10mM PBS (pH7.4) 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 37ºC 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]

AHYNAEILKSIDNEWRKTQCMPREVCIDVGKEFGAATNTFFKPPCVSVYRCGGCCNSEGQQCMNTSTSY
LSKTLFEITVPLSQGPKPVTISFANHTSCRCMSKLDVYRQVHSIIRR

[ACTIVITY]

Vascular Endothelial Growth Factor C (VEGFC) is a key lymphangiogenic factor that primarily binds to VEGFR-3 (FLT4), promoting lymphatic endothelial cell proliferation, migration, and survival. It also activates VEGFR-2 (KDR) upon proteolytic processing, contributing to angiogenesis. VEGFC is essential for embryonic lymphatic development and adult lymphatic remodeling.Besides,Vascular Endothelial Growth Factor D (VEGFD) has been identified as an interactor of VEGFC, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant rabbit VEGFC and recombinant bovine VEGFD . Briefly, biotin-linked VEGFC were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 μl were then transferred to VEGFD-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST 3 times and incubation with Streptavidin-HRP for 30min, then wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50μl stop solution to the wells and read at 450nm immediately. The binding activity of recombinant rabbit VEGFC and recombinant bovine VEGFD was shown in Figure 1, the EC50 for this effect is 0.43ug/mL.

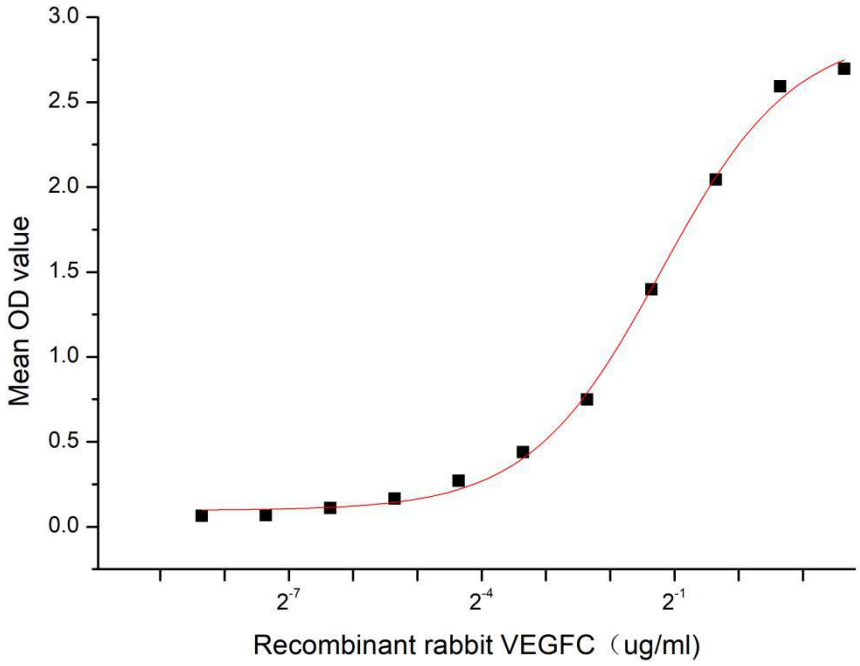

Figure 1. The binding activity of recombinant rabbit VEGFC and recombinant bovine VEGFD

[IDENTIFICATION]

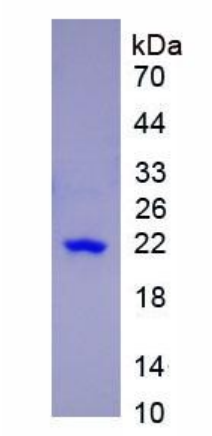

Figure 2. SDS-PAGE

Sample: Active recombinant VEGFC, Rabbit

[IMPORTANT NOTE]

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