

APC068Hu01 100µg
Active VEGF Co Regulated Chemokine 1 (VCC1)
Organism Species: *Homo sapiens* (Human)
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Leu24~Leu119

Tags: N-terminal His and GST Tag

Purity: >90%

Endotoxin Level: <1.0EU per 1µg (determined by the LAL method).

Buffer Formulation: PBS, pH7.4, containing 0.01% Sarcosyl, 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: 11.6

Predicted Molecular Mass: 44.3kDa

Accurate Molecular Mass: 41kDa 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 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]

LNPGVARGHRDRGQASRRWLQEGGQECECKDWFLRAPRRKFMTVSGLPKKQCPCDHFKGN
VKKTRHQRHHRKPNKHSRACQQFLKQCQLRSFALPL

[ACTIVITY]

VEGF Co-Regulated Chemokine 1 (VCC1), also known as CXC chemokine ligand 17 (CXCL17), is a recently identified secretory protein that functions as both a chemokine and an angiogenic factor. It is primarily expressed in mucosal tissues, particularly in the respiratory and digestive tracts, where it contributes to immune surveillance by recruiting dendritic cells and macrophages. VCC1 demonstrates dual functionality: it promotes angiogenesis through mechanisms synergistic with VEGF while also exerting antimicrobial activities in epithelial barriers. Its expression is often upregulated in inflammatory conditions and various cancers, where it may influence tumor microenvironment formation and immune modulation.

Besides, Chemokine C-C-Motif Receptor 8 (CCR8) has been identified as an interactor of VCC1, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human VCC1 and recombinant human CCR8. Briefly, VCC1 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 μ l were then transferred to CCR8-coated microtiter wells and incubated for 1h at 37°C. Wells were washed with PBST and incubated for 1h with anti-VCC1 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37 °C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 °C. Finally, add 50 μ L stop solution to the wells and read at 450/630nm



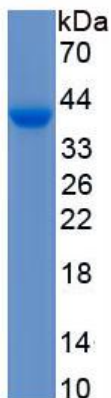


Figure 3. SDS-PAGE

Sample: Active recombinant VCC1, Human

[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.