



APE869Hu01 100µg

Active Complement Component 1, Q Subcomponent C (C1qC)

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: Lys117~Asp245

Tags: N-terminal His and GST Tag

Purity: >80%

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

Buffer Formulation: PBS, pH7.4, containing 0.01%Sarcosyl, 5% Trehalose.

Original Concentration: 150µg/mL

Applications: Activity Assays.

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

Predicted isoelectric point: 7.9

Predicted Molecular Mass: 44.2kDa

Accurate Molecular Mass: 44kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in ddH₂O 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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      KFQS VFTVTRQTHQ PPAPNSLIRF NAVLTNPQGD  
YDTSTGKFTC KVPGLYYFVY HASHTANLCV LLYRSGVKVV TFCGHTSKTN  
QVNSGGVLLR LQVGEEVWLA VNDYYDMVGI QGSDSVFSGF LLFPD
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[ACTIVITY]

Complement component 1Q subcomponent C (C1qC) is an important part of the C1 complex in the classical activation pathway of the complement system. C1qC contains multiple domains that recognize and bind to pathogen surfaces or antibody-antigen complexes. C1q associates with the proenzymes C1r and C1s to yield C1, the first component of the serum complement system. Thus a functional ELISA assay was conducted to detect the interaction of recombinant human C1qC and recombinant mouse C1r. Briefly, C1qC was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to C1r-coated microtiter wells and incubated for 1h at 37°C. Wells were washed with PBST and incubated for 1h with anti-C1qC 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 µL stop solution to the wells and read at 450/630nm immediately. The binding activity of recombinant human C1qC and recombinant mouse C1r was shown in Figure 1, the EC50 for this effect is 0.049ug/mL.

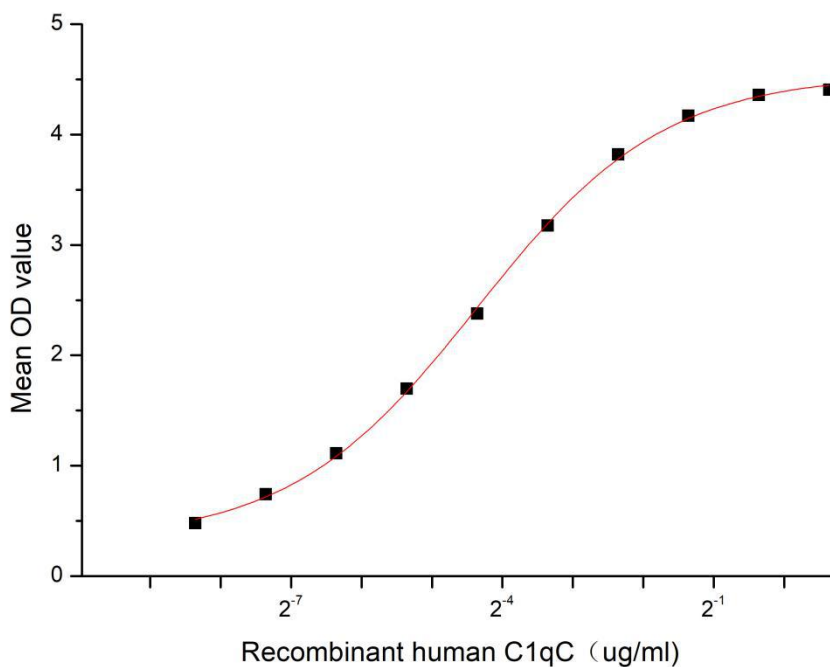


Figure 1. The binding activity of recombinant human C1qC and recombinant mouse C1r

[IDENTIFICATION]

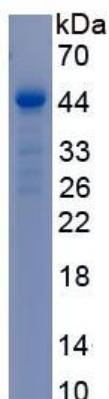


Figure 2. SDS-PAGE

[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.