APE869Hu01 50μg
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

1th Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression.
Host: *E. coli*
Residues: Lys117~Asp245
Tags: Two N-terminal Tags, His-tag and GST-tag
Purity: >94%
Endotoxin Level: <1.0EU per 1μg (determined by the LAL method).
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: 7.9
Predicted Molecular Mass: 44.2kDa
Accurate Molecular Mass: 44kDa 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 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]

KFQS VFTVTRQTHQ PPAPNSLIRF NAVLTNPQGD YDTSTGKFTC KVPGLYYFVY HASHTANLCV LLYRSGVKVV TFCGHTSKTN QVNSGGVLLR LQVGEEVWLA VNDYYDMVGI QGSDSVFSGF LLFPD

[ACTIVITY]

The complement component 1q (C1q) is composed of 18 polypeptide chains: six A-chains, six B-chains, and six C-chains. Complement Component 1, Q Subcomponent C (C1qC) is six C-chains of C1q. Complement component 1q (C1q is a protein complex involved in the complement system, which is part of the innate immune system. C1q together with C1r and C1s form the C1 complex. It is potentially multivalent for attachment to the complement fixation sites of immunoglobulin. The sites are on the CH2 domain of IgG and, it is thought, on the CH4 domain of IgM. IgG4 cannot bind C1q, but the other three IgG types can. Besides, Apolipoprotein A1 (APOA1) has been identified as an interactor of C1qC, thus a binding ELISA assay was conducted to detect the interaction of recombinant human C1qC and recombinant human APOA1. Briefly, C1qC were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100μL were then transferred to APOA1-coated microtiter wells and incubated for 2h at 37℃. 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, wells were aspirated and washed 3 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 C1qC and APOA1 was shown in Figure 1, and this effect was in a dose dependent manner.

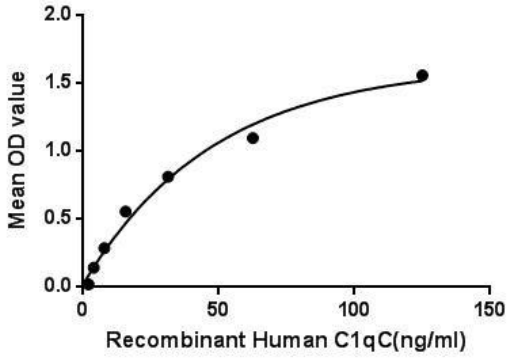

Figure 1. The binding activity of C1qC with APOA1.

[IDENTIFICATION]

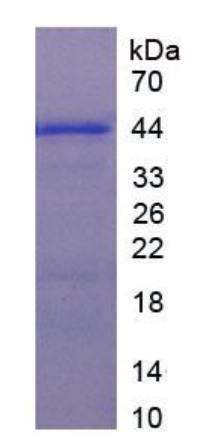

Figure 2. SDS-PAGE

Sample: Active recombinant C1qC, Human

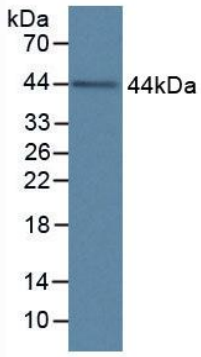

Figure 3. Western Blot

Sample: Recombinant C1qC, Human;

Antibody: Rabbit Anti-Human C1qC Ab (PAE869Hu01)

[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.