APD208Hu01 50μg
Active Complement Component 1, Q Subcomponent B (C1qB)
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: Gln28~Ala253
Tags: N-terminal His-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: 8.9
Predicted Molecular Mass: 37.5kDa
Accurate Molecular Mass: 38kDa 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]

QLS CTGPPAIPGI PGIPGTPGPD
GQPGTPGIKG EKGLPGLAGD HGEFGEKGDP GIPGNPGKVG PKGPMGPKGG
PGAPGAPGPK GESGDYKATQ KIAFSATRTI NVPLRRDQTI RFDHVITNMN
NNYEPRSGKF TCKVPGLYYF TYHASSRGNL CVNLMRGRER AQKVVTFCDY
AYNTFQVTTG GMVLKLEQGE NVFLQATDKN SLLGMEGANS IFSGFLLFPD
MEA

[ACTIVITY]

The complement component 1q (or simply 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. Antibodies of the adaptive immune system can bind antigen, forming an antigen-antibody complex. When C1q binds antigen-antibody complexes, the C1 complex becomes activated. Activation of the C1 complex intitiates the classical complement pathway of the complement system. The antibodies IgM and all IgG subclasses except IgG4 are able to initiate the complement system. C1q is composed of 18 polypeptide chains: six A-chains, six B-chains, and six C-chains. Complement Component 1, Q Subcomponent B (C1qB) is six B-chains of C1q. Besides, Profilin 1 (PFN1) has been identified as an interactor of C1qB, thus a binding ELISA assay was conducted to detect the interaction of recombinant human C1qB and recombinant human PFN1. Briefly, C1qB were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100μL were then transferred to PFN1-coated microtiter wells and incubated for 2h at 37℃. Wells were washed with PBST and incubated for 1h with anti-C1qB 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 C1qB and PFN1 was shown in Figure 1, and this effect was in a dose dependent manner.

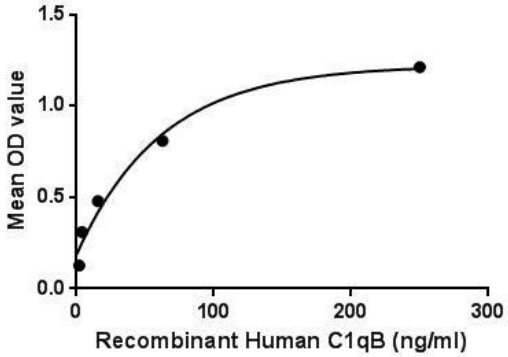

Figure 1. The binding activity of C1qB with PFN1.

[IDENTIFICATION]

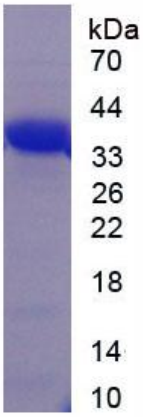

Figure 2. SDS-PAGE

Sample: Active recombinant C1qB, Human

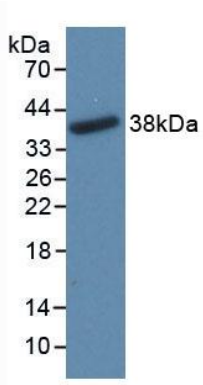

Figure 3. Western Blot

Sample: Recombinant C1qB, Human;

Antibody: Rabbit Anti-Human C1qB Ab (PAD208Hu01)

[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.