APB823Hu01 100μg
Active Complement Component 9 (C9)
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: Gln22~His265
Tags: N-terminal His-tag
Purity: >95%
Endotoxin Level: <1.0EU per 1μg (determined by the LAL method).
Buffer Formulation: PBS, pH7.4, containing 0.01% SKL, 5%Trehalose .
Original Concentration: 200μg/mL
Applications: Cell culture; Activity Assays.
(May be suitable for use in other assays to be determined by the end user.)
Predicted isoelectric point: 5.0
Predicted Molecular Mass: 31.5kDa
Accurate Molecular Mass: 32kDa 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 2-8ºC for one month.
Aliquot and store at -80ºC 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]

QYTTSYDPE LTESSGSASH IDCRMSPWSE
WSQCDPCLRQ MFRSRSIEVF GQFNGKRCTD AVGDRRQCVP TEPCEDAEDD
CGNDFQCSTG RCIKMRLRCN GDNDCGDFSD EDDCESEPRP PCRDRVVEES
ELARTAGYGI NILGMDPLST PFDNEFYNGL CNRDRDGNTL TYYRRPWNVA
SLIYETKGEK NFRTEHYEEQ IEAFKSIIQE KTSNFNAAIS LKFTPTETNK
AEQCCEETAS SISLH

[ACTIVITY]

Complement Component 9 (C9), a component of the Membrane attack Complex (MAC) plays a key role in the innate and adaptive immune response by forming pores in the plasma membrane of target cells. During MAC assembly, multiple copies of C9 are sequentially recruited to membrane associated C5b8 to form a pore. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human C9 and recombinant human C5. Briefly, biotin-linked C9 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to C5-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 50 µl stop solution to the wells and read at 450 nm immediately. The binding activity of recombinant human C9 and recombinant human C5 was shown in Figure 1, the EC50 for this effect is 0.13 ug/mL.

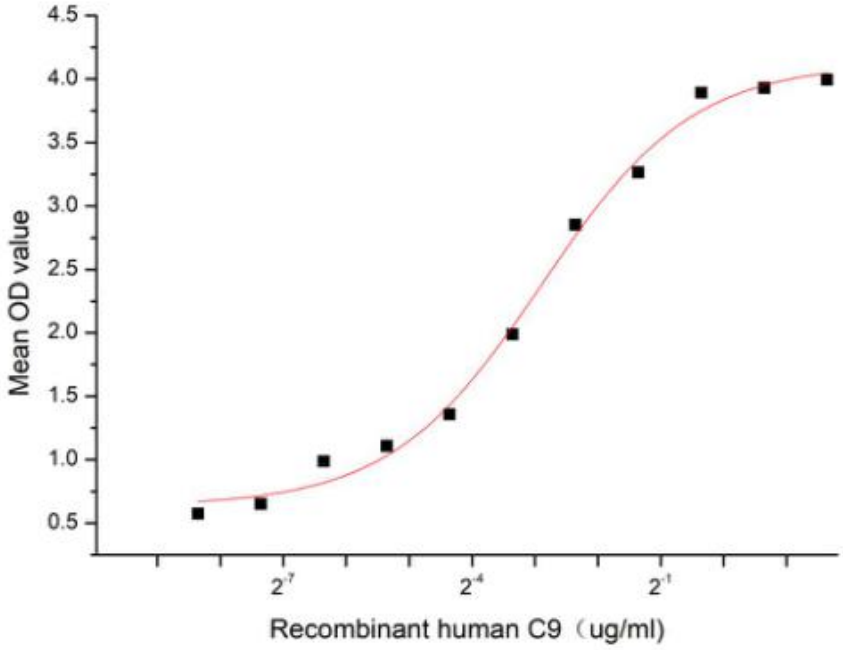

Figure 1. The binding activity of recombinant human C9 and recombinant human C5

[IDENTIFICATION]

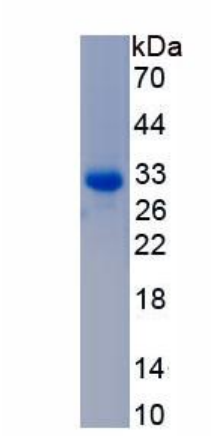

Figure 2. SDS-PAGE

Sample: Active recombinant C9, 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.