APB306Hu01 100μg
Active Complement Component 8b (C8b)
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: Cys162~His504
Tags: N-terminal His-tag
Purity: >90%
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: 7.3
Predicted Molecular Mass: 43.2kDa
Accurate Molecular Mass: 43kDa 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]

CQHEMDQYW GIGSLASGIN
LFTNSFEGPV LDHRYYAGGC SPHYILNTRF RKPYNVESYT PQTQGKYEFI LKEYESYSDF
ERNVTEKMAS KSGFSFGFKI PGIFELGISS QSDRGKHYIR RTKRFSHTKS VFLHARSDLE
VAHYKLKPRS LMLHYEFLQR VKRLPLEYSY GEYRDLFRDF GTHYITEAVL GGIYEYTLVM
NKEAMERGDY TLNNVHACAK NDFKIGGAIE EVYVSLGVSV GKCRGILNEI KDRNKRDTMV
EDLVVLVRGG ASEHITTLAY QELPTADLMQ EWGDAVQYNP AIIKVKVEPL YELVTATDFA
YSSTVRQNMK QALEEFQKEV SSCH

[ACTIVITY]

Complement Component 8b (C8b), one of the three subunits of the complement component 8 (C8) protein, has only been identified in vertebrates. C8 is one of the five components (C5b, C6, C7, C8 and C9) that interact to form the MAC that plays a key role in the innate and adaptive immune response by forming pores in the plasma membrane of target cells. Besides, C9 can interact with C8b, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human C8b and recombinant human C9. Briefly, C8b was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 μl were then transferred to C9-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST and incubated for 1h with anti-C8b pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37℃, 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 450/630 nm immediately. The binding activity of

recombinant human C8b and recombinant human C9 was shown in Figure 1, the EC50 for this effect is 0.59 ug/mL.

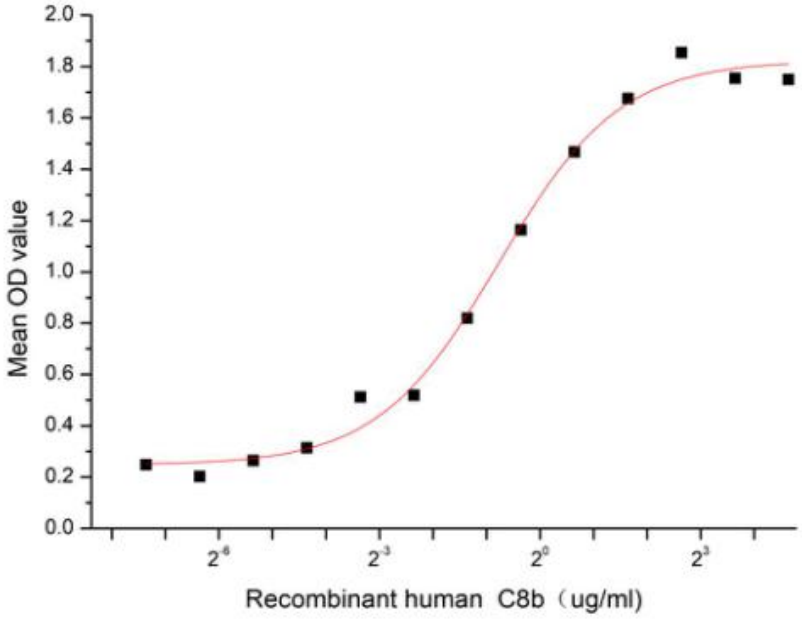

Figure 1. The binding activity of recombinant human C8b and recombinant human C9

[IDENTIFICATION]

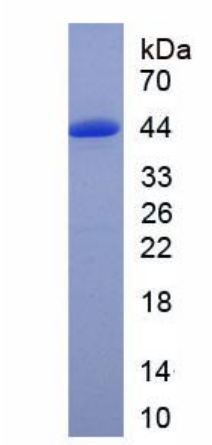

Figure 2. SDS-PAGE

Sample: Active recombinant C8b, 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.