

APB969Hu02 100µg
Active Complement Component 5 (C5)
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: Ser1055~Asn1513

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: 6.4

Predicted Molecular Mass: 55.2kDa

Accurate Molecular Mass: 55kDa 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 2-8°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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SIMSYR NADYSYSVWK GGSASTWLTA FALRVLGQVN KYVEQNQNSI
CNSLLWLVEN YQLDNGSFKE NSQYQPIKLQ GTLPVEAREN SLYLTAFTVI
GIRKAFDICP LVKIDTALIK ADNFLLENTL PAQSTFTLAI SAYALSLGDK
THPQFRSIVS ALKREALVKG NPPIYRFWKD NLQHKDSSVP NTGTARMVET
TAYALLTSLN LKDINYVNPV IKWLSEEQRY GGGFYSTQDT INAIEGLTEY
SLLVKQLRLS MDIDVSYKHK GALHNYKMTD KNFLGRPVEV LLNDDLIVST
GFGSGLATVH VTTVVHKTST SEEVCSFYLK IDTQDIEASH YRGYGNSDYK
RIVACASYKP SREESSGSS HAVMDISLPT GISANEEDLK ALVEGVDQLF
TDYQIKDGHV ILQLNSIPSS DFLCVRFRIE ELFEVGFLSP ATFTVYEHYR
PDKQCTMFYS TSN
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[ACTIVITY]

Complement Component 5 (C5), which forms part of the later stages of the complement pathway, is cleaved into C5a and C5b. C5a is a chemotactic agent for neutrophils, while C5b forms part of the complement membrane attack complex. Coagulation Factor II (F2) has been identified as an interactor of C5, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human C5 and recombinant mouse F2. Briefly, C5 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 μ l were then transferred to F2-coated microtiter wells and incubated for 1h at 37°C. Wells were washed with PBST and incubated for 1h with anti-C5 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 μ L stop solution to the wells and read at 450/630 nm immediately. The binding activity of

recombinant human C5 and recombinant mouse F2 was shown in Figure 1, the EC50 for this effect is 0.22 ug/mL.

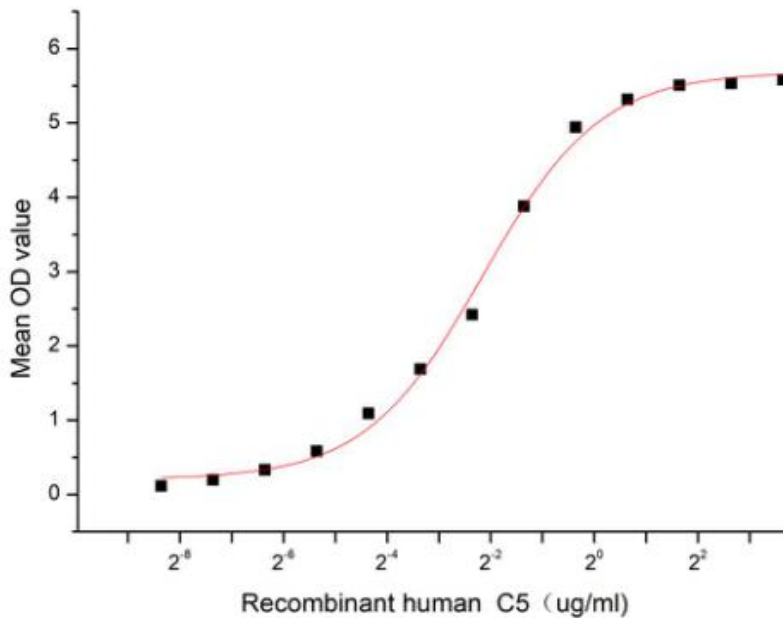


Figure 1. The binding activity of recombinant human C5 and recombinant mouse F2

[IDENTIFICATION]

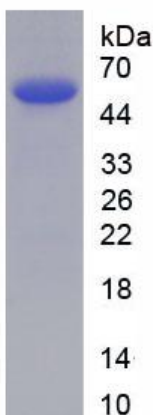


Figure 2. SDS-PAGE

Sample: Active recombinant C5, 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.