APC011Mu01 100μg
Active Complement Factor B (CFB)
Organism Species: *Mus musculus (Mouse)*
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression.
Host: *E. coli*
Residues: Val32~Asp157
Tags: N-terminal His-tag
Purity: >98%
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: 6.3
Predicted Molecular Mass: 15.5kDa
Accurate Molecular Mass: 14kDa 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.

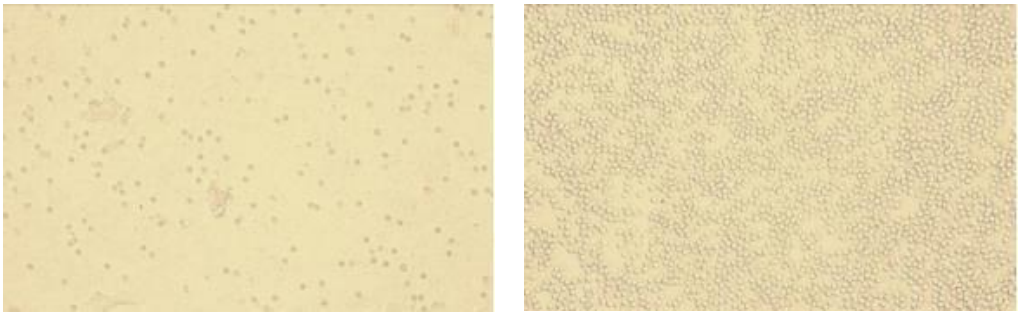
Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37ºC for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCE]

VSCSLEGVE IKGGSFQLLQ
GGQALEYLCP SGFYPYPVQT RTCRSTGSWS DLQTRDQKIV QKAECRAIRC
PRPQDFENGE FWPRSPFYNL SDQISFQCYD GYVLRGSANR TCQENGRWDG
QTAICDD

[ACTIVITY]

Complement Factor B (CFB) a component of the alternative pathway of complement activation. Upon activation of the alternative pathway, it is cleaved by complement factor D yielding the noncatalytic chain Ba and the catalytic subunit Bb. The active subunit Bb is a serine protease that associates with C3b to form the alternative pathway C3 convertase. The method of functional assay of CFB was tested in hemolysis assays. Two-fold dilute the recombinant mouse CFB with 0.9% NaCl, 2mmol/L MgCl2, and then add same volume of 1% rabbit erythrocyte (RaE) in 8mmol/L EDTA, the negative control only without $MgCl_2$. All the samples incubated at 37℃. After 3 hours later, take 10μL supernatant and 90μL TMB incubated at 37℃ for 10 minutes. Finally, add 50μL stop solution to the wells and read at 450nm immediately. The results are shown in Figure 1. It was obvious that the minimal effective concentration of CFB is 2μg/mL.



A B

Figure 1. The hemolysis effection of recombinant mouse CFB

(A) 1% rabbit erythrocyte (RaE) treated with 2μg/mL CFB for 1h.

(B) Negative control (1% RaE treated with 2μg/mL CFB, 8mmol/L EDTA) without $MgCl_2$.

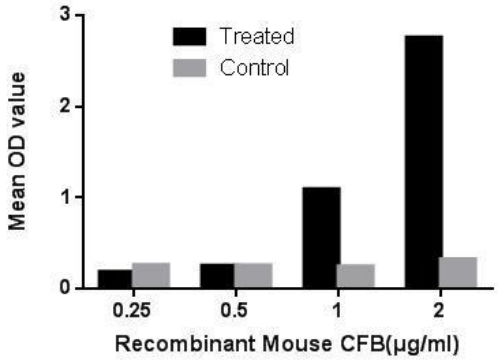


Figure2. The hemolysis activity of recombinant mouse CFB.

[IDENTIFICATION]

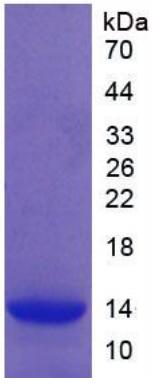


Figure 3. SDS-PAGE

Sample: Active recombinant CFB, Mouse

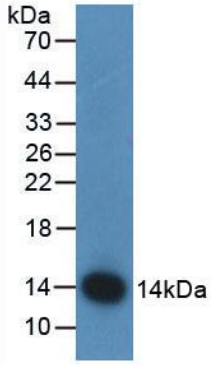


Figure 4. Western Blot

Sample: Recombinant CFB, Mouse;

Antibody: Rabbit Anti-Mouse CFB Ab (PAC011Mu01)

[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.