APC011Hu03 100μg
Active Complement Factor B (CFB)
Organism Species: *Homo sapiens (Human)*
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: Gly35~Asn160
Tags: Two N-terminal Tags, His-tag and GST-tag
Purity: >92%
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: 6.7
Predicted Molecular Mass: 44.3kDa
Accurate Molecular Mass: 44kDa 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.

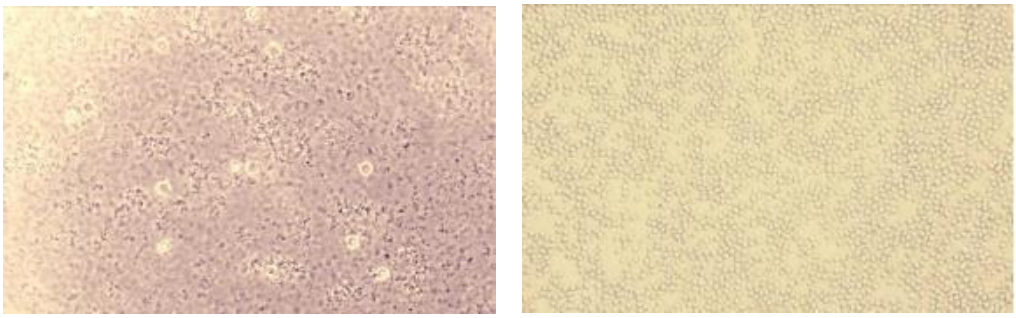
Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37ºC for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date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

[SEQUENCE]

GSCSLE GVEIKGGSFR
LLQEGQALEY VCPSGFYPYP VQTRTCRSTG SWSTLKTQDQ KTVRKAECRA
IHCPRPHDFE NGEYWPRSPY YNVSDEISFH CYDGYTLRGS ANRTCQVNGR
WSGQTAICDN

[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 human CFB with 0.9% NaCl, 2mmol/L $MgCl_2$,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 5-10 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 0.3125μg/mL.



A B

Figure 1. The hemolysis effection of recombinant human CFB.

(A) 1% rabbit erythrocyte (RaE) treated with 0.3125μg/mL CFB for 1h

(B) Negative control (1% RaE treated with 0.3125ug/mL CFB, 8mmol/L EDTA) without $MgCl_2$.

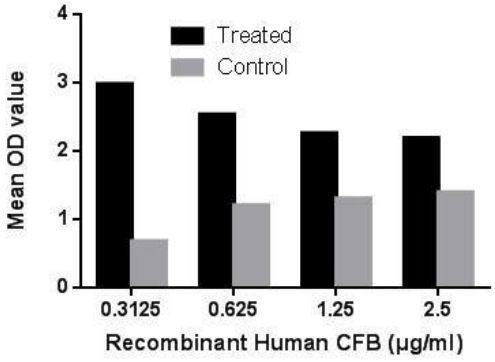


Figure2. The hemolysis activity of recombinant human CFB.

[IDENTIFICATION]

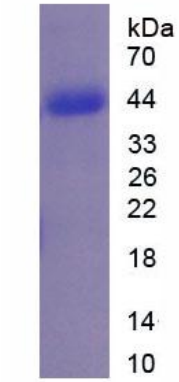


Figure 3. SDS-PAGE

Sample: Active recombinant CFB, Human

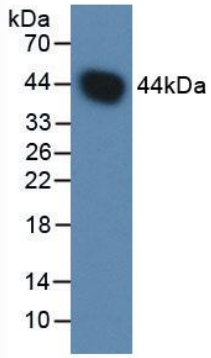


Figure 4. Western Blot

Sample: Recombinant CFB, Human;

Antibody: Rabbit Anti-Human CFB Ab (PAC011Hu03)

[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.