

APB215Hu01 100µg
Active Fibrinogen Beta Chain (FGB)
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: Gly45~Gln491

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: 7.6

Predicted Molecular Mass: 52.0kDa

Accurate Molecular Mass: 52kDa 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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                                                                                                                                 GHRPLD
KKREEAPSLR PAPPPISSGGG YRARPAKAAA TQKKVERKAP DAGGCLHADP
DLGVLCPGTC QLQEALLQQE RPIRNSVDEL NNNVEAVSQT SSSSFQMYL
LKDLWQKRQK QVKDNENVVN EYSSELEKHQ LYIDETVNSN IPTNLRVLRS
ILENLRSKIQ KLESDVSAQM EYC RTPCTVS CNIPVVSGKE CEEIIRKGGE
TSEMYLIQPD SSVKPYRVYC DMNTENGGWT VIQNRQDGSV DFGRKWDPYK
QGFGNVATNT DGKNYCGLPG EYWLGNCKIS QLTRMGPTL LIEMEDWKGD
KVKAHYGGFT VQNEANKYQI SVNKYRGTAG NALMDGASQL MGENRTMTIH
NGMFFSTYDR DNDGWLTS DP RKQCSKEDGG GWWYNRCHAA NPNGRYYWGG
QYTWDMAKHG TDDGVVWMNW KGSWYSMRKM SMKIRPFFPQ Q
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[ACTIVITY]

Fibrinogen Beta Chain (FGB) is the beta subunit of the coagulation factor fibrinogen, which is a component of the blood clot. Following vascular injury, fibrinogen is cleaved by thrombin to form fibrin which is the most abundant component of blood clots. Fibrinogen Alpha Chain (FGA) has been identified as an interactor of FGB. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human FGB and recombinant mouse FGA. Briefly, FGB was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 μ l were then transferred to FGA-coated microtiter wells and incubated for 1h at 37°C. Wells were washed with PBST and incubated for 1h with anti-FGB 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 FGB and recombinant mouse FGA was shown in Figure 1, the EC50 for this effect is 0.03 ug/mL.

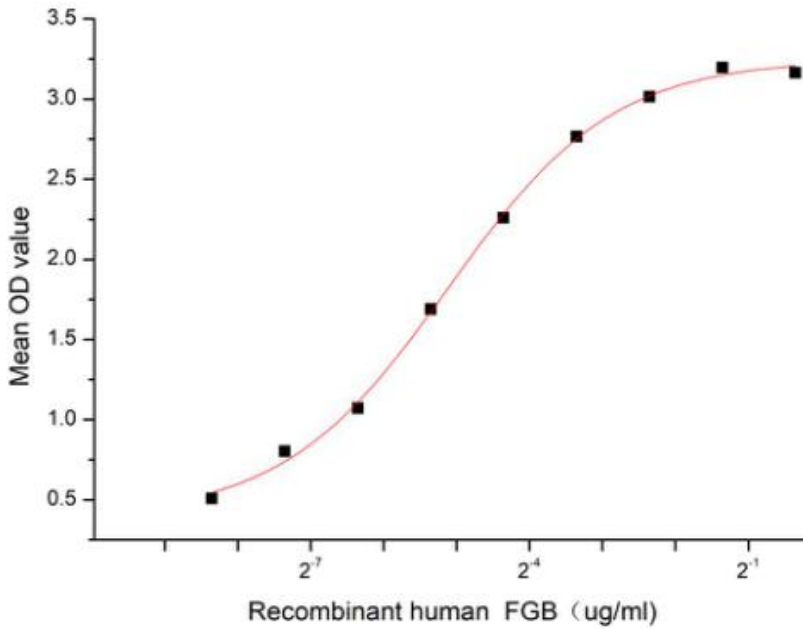


Figure 1. The binding activity of recombinant human FGB and recombinant mouse FGA

[IDENTIFICATION]

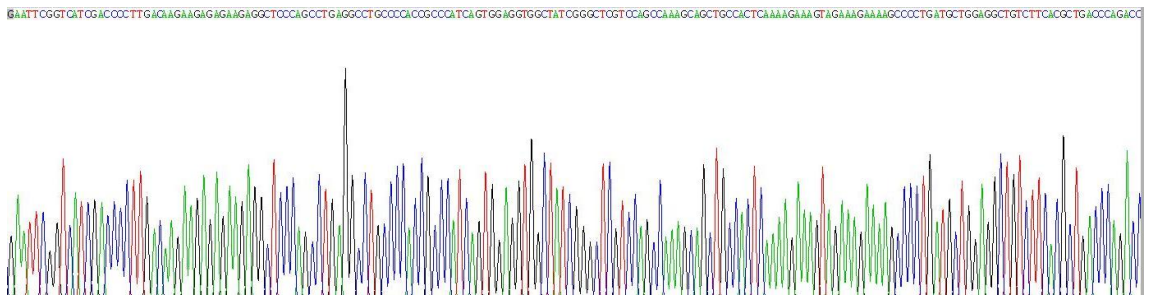


Figure 2. Gene Sequencing (extract)

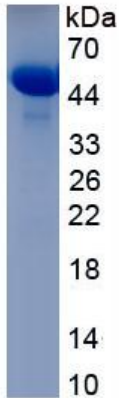


Figure 3. SDS-PAGE

Sample: Active recombinant FGB, 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.