

**APB215Mu01 100µg**  
**Active Fibrinogen Beta Chain (FGB)**  
**Organism Species: *Mus musculus (Mouse)***  
***Instruction manual***

FOR RESEARCH USE ONLY  
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

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13th Edition (Revised in Aug, 2023)

## **[ PROPERTIES ]**

**Source:** Prokaryotic expression.

**Host:** *E. coli*

**Residues:** Gly35~Gln481

**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:** 8.2

**Predicted Molecular Mass:** 52.1kDa

**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** ]

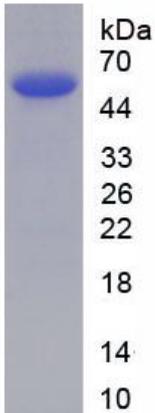
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                                     GHRPVD RRKEEPPSLR
PAPPPISGGG YRARPAKATA NQKKVERRPP DAGGCLHADT DMGVLCPTGC
TLQQTLLNQE RPIKSSIAEL NNNIQSVSDT SSVTFQYLTL LKDMWKKKQA
QVKENENVIN EYSSILEDQR LYIDETVNDN IPLNLRVLRSL ILEDLRSKIQ
KLESDISAQM EYCRTPCTVS CNIPVVSQKE CEEIIRKQGE TSEMYLIQPD
TSIKPYRVYC DMKTENGGWT VIQNRQDGSV DFGRKNDPYK KGFGNIATNE
DAKKYCGLPG EYWLGNQKIS QLTRMGPTL LIEMEDWKGD KVKAHYGGFT
VQNEASKYQV SVNKYKGTAG NALMDGASQL VGENRTMTIH NGMFFSTYDR
DNDGWVTTDP RKQCSKEDGG GWWYNRCHAA NPNGRYWGG LYSWDMSKHG
TDDGVVWMNW KGSWYSMRRM 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. Studies have shown that fibrinogen can enhance expression of SELP in activated platelets via an ITGB3-dependent pathway. Thus a functional ELISA assay was conducted to detect the interaction of recombinant mouse FGB and recombinant human ITGb3. Briefly, FGB was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100  $\mu$ l were then transferred to ITGb3-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  $\mu$ L stop solution to the wells and read at 450/630nm immediately. The binding activity of recombinant mouse





**Figure 3. SDS-PAGE**

**Sample: Active recombinant FGB, Mouse**

**[ 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.