

Fibrinogen Beta Chain (FGB) Active Protein | FGB active protein

Active Fibrinogen Beta Chain (FGB)

CATALOG # AAA161834	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Fibrinogen Beta Chain (FGB); Active Fibrinogen Beta Chain (FGB); Fibrinogen Beta Chain; FG-B; Fibrinopeptide B; Fibrinogen Beta4; FGB active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 95% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Gly35~Gln4 81
Applicable Applications for FGB active protein	Activity Assay, Cell Culture
Species	Mouse
Expression System	Prokaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	8.2
Research Area	Signal transduction, Infection immunity, Hematology
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months

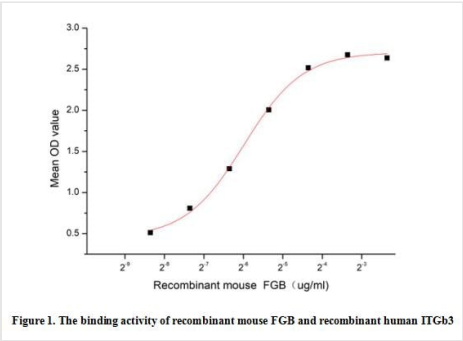


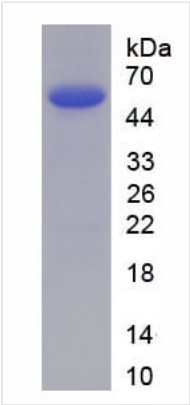
Figure 1. The binding activity of recombinant mouse FGB and recombinant human ITGb3

Bioactivity

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 ul were then transferred to ITGb3-coated microtiter wells and incubated for 1h at 37 degree 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 degree C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50 uL stop solution to the wells and read at 450/630nm immediately. The binding activity of recombinant mouse FGB and recombinant human ITGb3 was shown in Figure 1, the EC50 for this effect is 0.016 ug/mL.

SDS-PAGE

Figure. SDS-PAGE



ADDITIONAL INFORMATION

Product Categories/Family for FGB active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	33859809
NCBI GeneID	110135
NCBI Accession #	NP_862897.1
NCBI GenBank Nucleotide #	NM_181849.3
UniProt Accession #	Q8K0E8; Q91ZP1
Molecular Weight	54,753 Da
NCBI Official Full Name	fibrinogen beta chain preproprotein
NCBI Official Synonym Full Names	fibrinogen beta chain
NCBI Official Symbol	Fgb
NCBI Official Synonym Symbols	2510049G14Rik
NCBI Protein Information	fibrinogen beta chain
UniProt Protein Name	Fibrinogen beta chain
UniProt Gene Name	Fgb

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.