



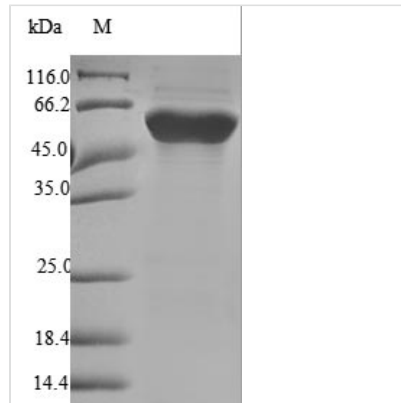
Recombinant Human Fibrinogen beta chain (FGB), partial

Product Code	CSB-EP008608HU
Relevance	Cleaved by the protease thrombin to yield monomers which, together with fibrinogen alpha (FGA) and fibrinogen gamma (FGG), polymerize to form an insoluble fibrin matrix. Fibrin has a major function in hemostasis as one of the primary components of blood clots. In addition, functions during the early stages of wound repair to stabilize the lesion and guide cell migration during re-epithelialization. Was originally thought to be essential for platelet aggregation, based on in vitro studies using anticoagulated blood. However subsequent studies have shown that it is not absolutely required for thrombus formation in vivo. Enhances expression of SELP in activated platelets. Maternal fibrinogen is essential for successful pregnancy. Fibrin deposition is also associated with infection, where it protects against IFNG-mediated hemorrhage. May also facilitate the antibacterial immune response via both innate and T-cell mediated pathways.
Abbreviation	Recombinant Human FGB protein, partial
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P02675
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	GHRPLDKKREEAPSLRPAPPPISGGGYRARPAAAAATQKKVERKAPDAGGCL HADPDGLVLCPTGCQLQEALLQQERPIRNSVDELNNNVEAVSQTSSSSFQYM YLLKDLWQKRQKQVKDNEVVNEYSSSELEKHQLYIDETVNSNIPTNLRVLSIL ENLRSKIQKLESDVSAQMEYCRTPCTVSCNIPVVSQKECEEIIRKGGGETSEMYL IQPDSSVKPYRVYCDMNTENGGWTVIQNRQDGSVDFGRKWDPYKQGFGNVA TNTDGKNYCGLPGEYWLGNKISQLTRMGPTELLIEMEDWKGDVKVKAHYGGF TVQNEANKYQISVNKYRGTAGNALMDGASQLMGENRTMTIHNGMFFSTYDRD NDGWLTSDPRKQCSKEDGGGWWYNRCHAANPNGRYYWGGQYTWDMAKH GTDDGVVWMNWKGSWYSMRKMSMKIRPFFPQQ
Source	E.coli
Target Names	FGB
Protein Names	Recommended name: Fibrinogen beta chain Cleaved into the following 2 chains: 1. Fibrinopeptide B 2. Fibrinogen beta chain
Expression Region	45-491aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at

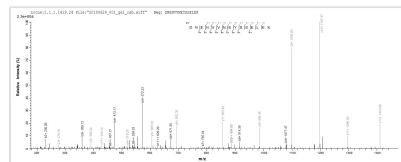
4°C for up to one week.

Tag Info	N-terminal 6xHis-tagged
Mol. Weight	54.8kDa
Protein Length	partial

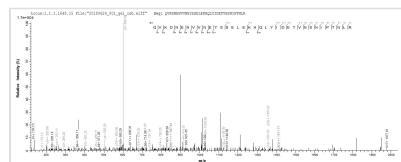
Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP008608HU could indicate that this peptide derived from E.coli-expressed Homo sapiens (Human) FGB.



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Description

CUSABIO transfected the expression vector which inserted the recombinant DNA into the E.coli, cultured the cells, and then induced the transcription and translation of the cloned vector. The N-terminal 6xHis tag sequence was appended to the gene coding for the E.coli of the human FGB protein to form the recombinant DNA. The recombinant human FGB was expressed as N-terminal 6xHis-tagged fusion. The purity of the protein is greater than 90% assayed by SDS-PAGE. It has an apparent molecular weight of approximately 60 kDa.

Fibrinogen is a large, complex, fibrous glycoprotein with three pairs of polypeptide chains linked together by 29 disulfide bonds. Fibrinogen is the major plasma protein coagulation factor. Low plasma fibrinogen concentrations are therefore associated with an increased risk of bleeding due to impaired primary and secondary haemostasis. Fibrinogen is a classical positive acute-phase reactant protein and is an independent predictor of coronary heart disease events. Plasma fibrinogen is an important component of the coagulation cascade, as well as a major determinant of blood viscosity and blood flow. Increasing evidence from epidemiological studies suggests that elevated plasma fibrinogen levels are associated with an increased risk of cardiovascular



disorders, including ischaemic heart disease (IHD), stroke and other thromboembolism. This increase in plasma fibrinogen levels may promote a prothrombotic or hypercoagulable state, and may in part explain the risk of stroke and thromboembolism in conditions such as atrial fibrillation.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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