Recombinant Human Coagulation factor XIII B chain (F13B)

Product Code	CSB-EP007922HU-B
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P05160
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	>85% (SDS-PAGE)
Sequence	EEKPCGFPHV ENGRIAQYYY TFKSFYFPMS IDKKLSFFCL AGYTTESGRQ EEQTTCTTEG WSPEPRCFKK CTKPDLSNGY ISDVKLLYKI QENMRYGCAS GYKTTGGKDE EVVQCLSDGW SSQPTCRKEH ETCLAPELYN GNYSTTQKTF KVKDKVQYEC ATGYYTAGGK KTEEVECLTY GWSLTPKCTK LKCSSLRLIE NGYFHPVKQT YEEGDVVQFF CHENYYLSGS DLIQCYNFGW YPESPVCEGR RNRCPPPPLP INSKIQTHST TYRHGEIVHI ECELNFEIHG SAEIRCEDGK WTEPPKCIEG QEKVACEEPP FIENGAANLH SKIYYNGDKV TYACKSGYLL HGSNEITCNR GKWTLPPECV ENNENCKHPP VVMNGAVADG ILASYATGSS VEYRCNEYYL LRGSKISRCE QGKWSSPPVC LEPCTVNVDY MNRNNIEMKW KYEGKVLHGD LIDFVCKQGY DLSPLTPLSE LSVQCNRGEV KYPLCTRKES KGMCTSPPLI KHGVIISSTV DTYENGSSVE YRCFDHHFLE GSREAYCLDG MWTTPPLCLE PCTLSFTEME KNNLLLKWDF DNRPHILHGE YIEFICRGDT YPAELYITGS ILRMQCDRGQ LKYPRCIPRQ STLSYQEPLR T
Source	E.coli
Target Names	F13B
Protein Names	Recommended name: Coagulation factor XIII B chain Alternative name(s): Fibrin-stabilizing factor B subunit Protein-glutamine gamma-glutamyltransferase B chain Transglutaminase B chain
Expression Region	21-661
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	Full Length of Mature Protein
Target Details	This gene encodes coagulation factor XIII B subunit. Coagulation factor XIII is the last zymogen to become activated in the blood coagulation cascade. Plasma factor XIII is a heterotetramer composed of 2 A subunits and 2 B subunits. The A subunits have catalytic function, and the B subunits do not have enzymatic activity and may serve as a plasma carrier molecules. Platelet factor XIII is comprised only of 2 A subunits, which are identical to those of plasma origin. Upon activation by the cleavage of the activation peptide by thrombin and in the presence of calcium ion, the plasma factor XIII dissociates its B subunits and yields the same active enzyme, factor XIIIa, as platelet factor XIII. This enzyme

	acts as a transglutaminase to catalyze the formation of gamma-glutamyl-epsilon-lysine crosslinking between fibrin molecules, thus stabilizing the fibrin clot. Factor XIII deficiency is classified into two categories: type I deficiency, characterized by the lack of both the A and B subunits; and type II deficiency, characterized by the lack of the A subunit alone. These defects can result in a lifelong bleeding tendency, defective wound healing, and habitual abortion.
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	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.