



Recombinant Human Coagulation factor X (F10)

Product Code	CSB-EP007915HU-B
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P00742
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	>85% (SDS-PAGE)
Sequence	ANSFLEEMKK GHLERECMEE TCSYEEAREV FEDSDKTNEF WNKYKGDGQC ETSPCQNQGK CKDGLGEYTC TCLEGFEGKN CELFTRKLCS LDNGDCDQFC HEEQNSVCS CARGYTLADN GKACIPTGPY PCGKQTLERR KRSVAQATSS SGEAPDSITW KPYDAADLDP TENPFDLLDF NQTQPERGDN NLTRIVGGQE CKDGECPWQA LLINEENEGF CGGTILSEFY ILTAAHCLYQ AKRKFVVRVD RNTEQEEGGE AVHEVEVVIK HNRFTKETD FDIAVLRKT PITFRMNVAP ACLPERDWAE STLMTQKTGI VSGFGRTHEK GRQSTRKML EVPYVDRNSC KLSSSFIITQ NMFCAGYDTK QEDACQGDSG GPHVTRFKDT YFVTGIVSWG EGCARKGKYG IYTKVTAFLK WIDRSMKTRG LPKAKSHAPE VITSSPLK
Source	E.coli
Target Names	F10
Protein Names	Recommended name: Coagulation factor X EC= 3.4.21.6 Alternative name(s): Stuart factor Stuart-Prower factor Cleaved into the following 3 chains: 1. Factor X light chain 2. Factor X heavy chain 3. Activated factor Xa heavy ch
Expression Region	41-488
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 the vitamin K-dependent coagulation factor X of the blood coagulation cascade. This factor undergoes multiple processing steps before its preproprotein is converted to a mature two-chain form by the excision of the tripeptide RKR. Two chains of the factor are held together by 1 or more disulfide bonds; the light chain contains 2 EGF-like domains, while the heavy chain contains the catalytic domain which is structurally homologous to those of the other hemostatic serine proteases. The mature factor is activated by the cleavage of the activation peptide by factor IXa (in the intrinsic pathway), or by factor VIIa (in the extrinsic pathway). The activated factor then converts prothrombin to thrombin in the presence of factor Va, Ca ²⁺ , and phospholipid during blood clotting. Mutations of this gene result in factor X deficiency, a hemorrhagic condition of variable severity.
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.