



Recombinant Mouse Coagulation factor X (F10)

Product Code	CSB-EP007915MO-B
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	O88947
Product Type	Recombinant Protein
Immunogen Species	Mus musculus (Mouse)
Purity	>85% (SDS-PAGE)
Sequence	ANSFFEEFKK GNLERECMEE ICSYEEVREI FEDDEKTKEY WTKYKDGQDC ESSPCQNQGA CRDGIGGYTC TCSEGFEGKN CELFVRKLCR LDNGDCDQFC REEQNSVCS CASGYFLGND GKSCISTAPF PCGKITTGRR KRSVALNTSD SELDLEDALL DEDFLSPTEN PIELLNINLNET QPERSSDDL V RIVGGRECKD GECPWQALLI NEDNEGFCGG TILNEFYILT AAHCLHQARR FKVRVGDNRN EKEEGNEMVH EVDVVIKHNK FQRDTYDYDI AVLRLKTPIT FRMNVAPACL PQKDWAEESTL MTQKTGIVSG FGRTHEKGRQ SNILKMLEVP YVDRNTCKLS TSFSITQNMF CAGYEAKLED ACQGDSGGPH VTRFKNTYYV TGIVSWGEGC ARKGKYGIYT KVTTFLLKWID RSMKARVGPT AETPRTAGPP N
Source	E.coli
Target Names	F10
Protein Names	Recommended name: Coagulation factor X EC= 3.4.21.6 Alternative name(s): Stuart factor Cleaved into the following 3 chains: 1. Factor X light chain 2. Factor X heavy chain 3. Activated factor Xa heavy chain
Expression Region	41-481
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.