



# Recombinant Bovine Coagulation factor X (F10)

<b>Product Code</b>	CSB-YP007915BO
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P00743
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Bos taurus (Bovine)
<b>Purity</b>	≥85% (SDS-PAGE)
<b>Sequence</b>	ANSFLEEVKQ GNLERECLEE ACSLEEAREV FEDAEQTDEF WSKYKDGDCQCEGHPCLNQQGH CKDGIGDYTC TCAEGFEGKN CEFSTREICS LDNGGCDQFCREERSEVRCS CAHGYVLGDD SKSCVSTERF PCGKFTQGRS RRWAIHTSEDALDASELEHY DPADLSPTES SLDLLGLNRT EPSAGEDGSQ VVRIVGGRDCAEGECPWQAL LVNEENEGFC GGILNEFYV LTAACHLHQA KRFTVRVGDRNTEQEEGNEM AHEVENTVKH SRFVKETYDF DIAVLRKTP IRFRRNVAPACLPEKDWAEA TLMTQKTGIV SGFGRTHEKG RLSSTLKMLE VPYVDRSTCKLSSSFTITPN MFCAGYDTQP EDACQGDSGG PHVTRFKDTY FVTGIVSWGEGCARKGKFGV YTKVSNFLKW IDKIMKARAG AAGSRGHSEA PATWTVPPPLPL
<b>Source</b>	Yeast
<b>Target Names</b>	F10
<b>Protein Names</b>	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
<b>Expression Region</b>	41-492
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full Length of Mature Protein
<b>Target Details</b>	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 <sup>2+</sup> , and phospholipid during blood clotting. Mutations of this gene result in factor X deficiency, a hemorrhagic condition of variable severity.
<b>Reconstitution</b>	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.