Recombinant Bovine Coagulation factor XII (F12)

Product Code	CSB-EP007918BO
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P98140
Product Type	Recombinant Protein
Immunogen Species	Bos taurus (Bovine)
Purity	>85% (SDS-PAGE)
Sequence	T PPWKGPKKHK LTDSEHTVVL TVTGEPCHFP FQYHRQLHHK CIHRGRPGPR PWCATTPNFE KDQRWAYCLE PKKVKDHCSK HNPCQKGGTC VNMPDGPRCI CADHFTGKHC QKEKCFEPQF FRFFHENEIW HRLEPAGVVK CQCKGPNAQC KPLASQVCRT NPCLNGGSCL QAEGHRLCRC APSFAGRLCD VDLKASCYDD RDRGLSYRGM AGTTLSGAPC QSWASEATYW NVTAEQVLNW GLGDHAFCRA STPPRGYRNP DNDTRPLCFI WKGDRLSWNY CRLAPCQAAA GHEHFPLPSP SALQKPESTT QTPLPSLTSG WCSPTPLASG GPGGCGQRLR KWLSSLNR
Source	E.coli
Target Names	F12
Protein Names	Recommended name: Coagulation factor XII EC= 3.4.21.38Alternative name(s): Hageman factor Short name= HAFCleaved into the following 2 chains: 1. Coagulation factor XIIa heavy chain 2. Coagulation factor XIIa light chain
Expression Region	20-368
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	Partial
Target Details	This gene encodes coagulation factor XII which circulates in blood as a zymogen. This single chain zymogen is converted to a two-chain serine protease with an heavy chain (alpha-factor XIIa) and a light chain. The heavy chain contains two fibronectin-type domains, two epidermal growth factor (EGF)-like domains, a kringle domain and a proline-rich domain, whereas the light chain contains only a catalytic domain. On activation, further cleavages takes place in the heavy chain, resulting in the production of beta-factor XIIa light chain and the alpha-factor XIIa light chain becomes beta-factor XIIa heavy chain. Prekallikrein is cleaved by factor XII to form kallikrein, which then cleaves factor XII first to alpha-factor XIIa and then to beta-factor XIIa. The active factor XIIa participates in the initiation of blood coagulation, fibrinolysis, and the generation of bradykinin and angiotensin. It activates coagulation factors VII and XI. Defects in this gene do not cause any clinical symptoms and the sole effect is that whole-blood clotting time is prolonged.
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.