

Human Coagulation factor X Protein (pro form)

Cat. No. CFX-HM201

Description

Source	Recombinant Human Coagulation factor X Protein is expressed from HEK293 with hFc (IgG1) tag at the C-terminus. The protein needs to be activated by Thermolysin for an activated form. It contains Asn32-Lys488.
Accession	P00742
Molecular Weight	The protein has a predicted MW of 77.32 kDa. Due to the furin cleavage site, the protein is cleaved into light and heavy chains and migrates as 25 kDa, 80-90 kDa and 100-120 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 0.1 EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 90% as determined by HPLC

Formulation and Storage

Formulation	Lyophilized from 0.22 µm filtered solution in 20mM HEPES, 150mM NaCl, 100mM L-Arginine (pH 7.5). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Coagulation factor X (FX), originally named Stuart-Prower factor, plays a pivotal role in the coagulation cascade, activating thrombin to promote platelet plug formation and prevent excess blood loss. Genetic variants in F10 may lead to FX deficiency and to impaired coagulation. FX variants are phenotypically classified as being type I, with the concomitant reduction of FX coagulant activity and FX antigen levels or type II, corresponding to a reduction in activity with normal antigen plasma levels.

Assay Data

Bis-Tris PAGE



Human Coagulation factor X on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

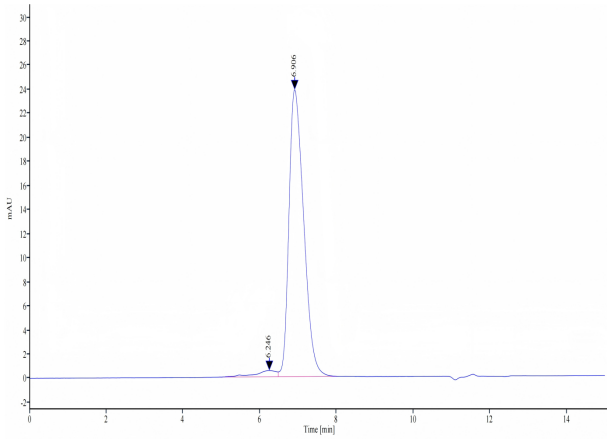
SEC-HPLC

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Assay Data



The purity of Human Coagulation factor X is greater than 90% as determined by SEC-HPLC.

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Assay Data

Bioactivity Data

Measured by its ability to cleave the fluorogenic peptide substrate, t-butyloxycarbonyl-Ile-Glu-Gly-Arg-7-amido-4-methylcoumarin (Boc-IEGR-AMC). The specific activity is >200 pmol/min/μg.