

Human Coagulation factor XI Protein (pro form), Ultra Low Endotoxin



Cat. No. FXI-HM101-UL

Description

Source	Recombinant Human Coagulation factor XI Protein is expressed from HEK293 with His tag at the C-Terminus. The protein needs to be activated by Thermolysin for an activated form. It contains Glu19-Val625.
Accession	P03951-1
Molecular Weight	The protein has a predicted MW of 69.1 kDa. Due to glycosylation, the protein migrates to 70-80 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 0.01 EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

Formulation	Lyophilized from 0.22 µm filtered solution in 25mM HEPES, 150mM NaCl (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 (F)XI has been described as a component of the early phase of the contact pathway of blood coagulation, acting downstream of factor XII. In contrast to its mild hemostatic activities, FXI is known to play a significant role in thrombosis, as it is a demonstrated independent risk factor for deep vein thrombosis, ischemic stroke, and myocardial infarction. A better understanding of the varied and complex role of FXI in both thrombosis and hemostasis will help to allow better prediction of bleeding risk in FXI-deficient patients and also informing the development of targeted agents to inhibit the thrombotic activities of FXI while preserving hemostasis.

Assay Data

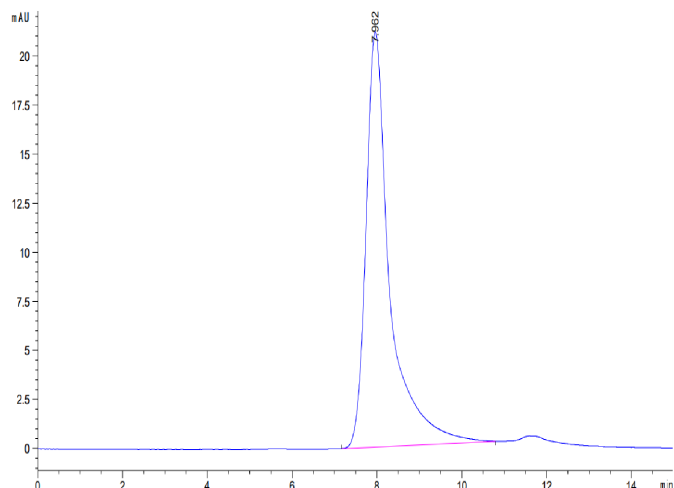
Bis-Tris PAGE



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

SEC-HPLC

Assay Data

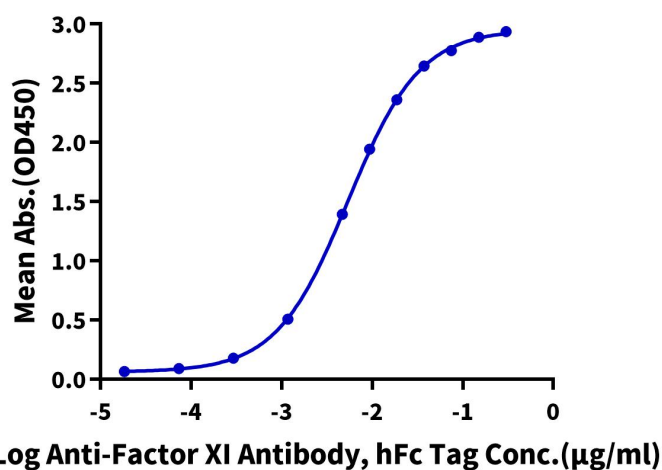


The purity of Human Coagulation factor XI is greater than 95% as determined by SEC-HPLC.

ELISA Data

Human Coagulation factor XI, His Tag ELISA

0.1µg Human Coagulation factor XI, His Tag Per Well



Immobilized Human Coagulation factor XI, His Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Anti-Factor XI Antibody, hFc Tag with the EC50 of 5.4ng/ml determined by ELISA.

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 >100 pmoles/min/µg.