Human Coagulation factor XI / FXI Protein, His Tag (active enzyme)

Catalog # FXI-H52H5

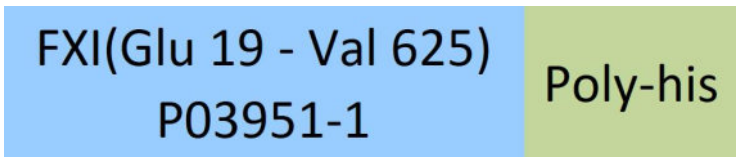
Synonym

Coagulation factor XI,FXI,PTA,F11

Source

Human Coagulation factor XI, His Tag(FXI-H52H5) is expressed from human 293 cells (HEK293). It contains AA Glu 19 - Val 625 (Accession # P03951-1). Predicted N-terminus: Glu 19

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 69.9 kDa. The protein migrates as 35 kDa and 50kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to Glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in 20 mM HEPES, 150 mM NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

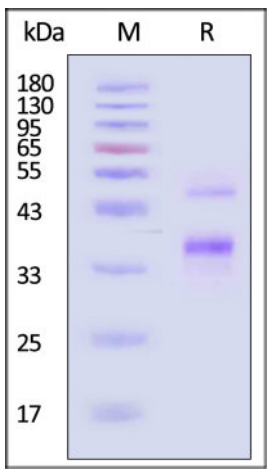
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human Coagulation factor XI, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

Bioactivity

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 (QC tested)

Background

Human Coagulation factor XI / FXI Protein, His Tag (active enzyme)

Catalog # FXI-H52H5

Coagulation factor XI is also known as F11, PTA and FXI. Factor XI triggers the middle phase of the intrinsic pathway of blood coagulation by activating factor IX. Factor XI is synthesized in the liver and circulates in the plasma as a disulfide bond-linked dimer complexed with high molecular weight kininogen. Selective cleavage of Arg-|-Ala and Arg-|-Val bonds in factor IX to form factor IXa. Factor XI is converted into XIa via either the contact phase of blood coagulation or thrombin-mediated activation on the platelet surface. The resulting XIa converts factor IX into IXa, which subsequently activates factor X into Xa.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.