Human Coagulation factor IX / F9 Protein, His Tag (active enzyme, MALS verified)

Catalog # FIX-H52H3

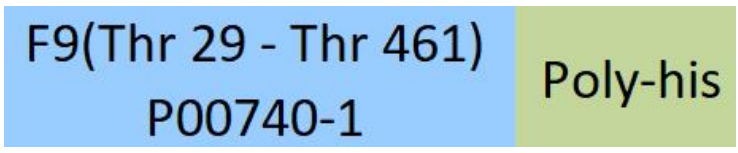
Synonym

Coagulation factor Ix,PTC,F9,THPH8,FIX,Plasma Thromboplastic Component,factor Ix

Source

Human Coagulation factor IX Protein, His Tag(FIX-H52H3) is expressed from human 293 cells (HEK293). It contains AA Thr 29 - Thr 461 (Accession # P00740-1).
Predicted N-terminus: Thr 29

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 50.6 kDa. The protein migrates as 60-70 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μm filtered solution in 50 mM Tris,150 mM NaCl,pH8.0 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

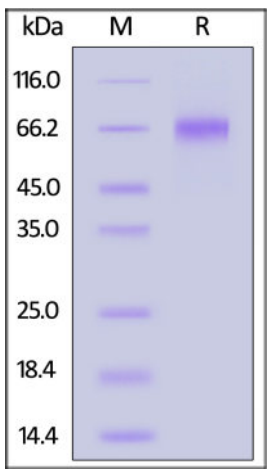
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

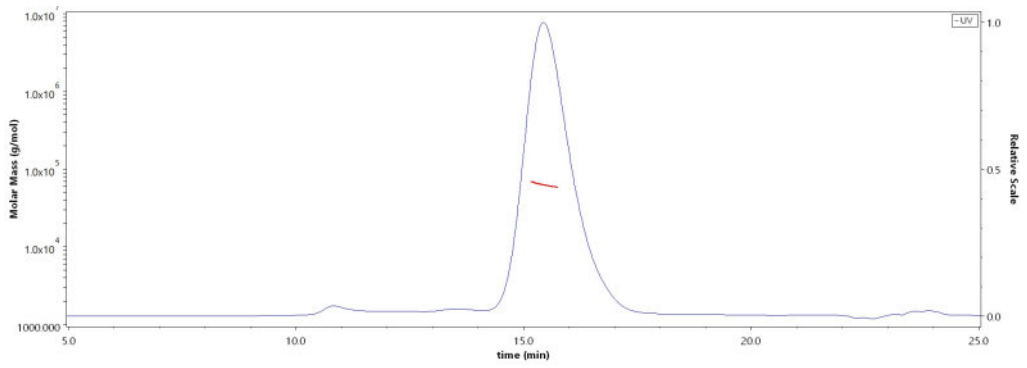
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human Coagulation factor IX Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS



The purity of Human Coagulation factor IX Protein, His Tag (Cat. No. FIX-H52H3) is more than 90% and the molecular weight of this protein is around 55-70 kDa verified by SEC-MALS.
Report

Bioactivity

Measured by its ability to cleave the fluorogenic peptide substrate, Mca-RPKPVE-Nval-WRK(Dnp)-NH2, The specific activity is 54-107 pmol/min/μg (QC tested).

Background

Coagulation factor VII is also known as F7, SPCA and Proconvertin. Heterodimer of a light chain and a heavy chain linked by a disulfide bond. Initiates the extrinsic pathway of blood coagulation. Serine protease that circulates in the blood in a zymogen form. Factor VII is converted to factor VIIa by factor Xa, factor XIIa, factor IXa, or thrombin by minor proteolysis. In the presence of tissue factor and calcium ions, factor VIIa then converts factor X to factor Xa by limited proteolysis. Factor VIIa will also convert factor IX to factor IXa in the presence of tissue factor and calcium.

Clinical and Translational Updates

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