

Recombinant Human Coagulation Factor IX/F9 Protein (His Tag)

Catalog No. PKSH032264

Note: Centrifuge before opening to ensure complete recovery of vial contents.

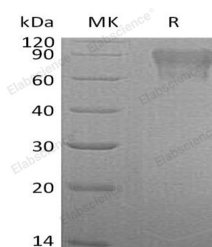
Description

Synonyms	Coagulation factor 9;F9;Coagulation factor IX;Christmas factor;Plasma thromboplastin component;Coagulation factor IXa light chain;Coagulation factor IXa heavy chain;FIX;HEMB;P19;PTC;THPH8
Species	Human
Expression Host	HEK293 Cells
Sequence	Thr 29-Thr461
Accession	P00740
Calculated Molecular Weight	49.8 kDa
Observed molecular weight	60-90 kDa
Tag	C-His
Bioactivity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.
Formulation	Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 150mM NaCl, 10% Glycerol, pH 8.0.
Reconstitution	Not Applicable

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Coagulation factor IX (F9), is a member of the peptidase S1 family. It contains two EGF-like domains, a Gla domain and a peptidase S1 domain. It is primarily expressed in the liver and secreted in plasma. Factor IX is a vitamin K-dependent plasma protein that participates in the intrinsic pathway of blood coagulation by converting factor X to its active form in

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the presence of Ca^{2+} ions, phospholipids, and factor VIIIa. Mutations in position 43 and 46 prevents cleavage of the propeptide, mutation in position 93 probably fails to bind to cell membranes, mutation in position 191 or in position 226 prevent cleavage of the activation peptide. Mutations of human F9 can result in thrombophilia and recessive X-linked hemophilia B (HEMB). An X-linked blood coagulation disorder characterized by a permanent tendency to hemorrhage, due to factor IX deficiency. It is phenotypically similar to hemophilia A, but patients present with fewer symptoms. Many patients are asymptomatic until the hemostatic system is stressed by surgery or trauma.