Recombinant Protein Technical Manual

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

RPES0769

Product Data:

Product SKU: RPES0769

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: P00740

Protein Information:

Molecular Mass: 49.8 kDa

AP Molecular Mass: 90 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg 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 TrisHCl,150mM NaCl,10% Glycerol,pH8.0.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

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

Immunogen Information:

Sequence: Thr 29-Thr461

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 the presence of Ca2+ 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.