



FACTOR IX DEFICIENT PLASMA

(Haematologic Technologies, Inc. Catalog #FIX-ID)

Intended Use

Haematologic Technologies' factor deficient plasmas are for research use or for further manufacture into *in vitro* diagnostic reagents.

Summary of Factor IX

The zymogen factor IX is a single chain vitamin K-dependent glycoprotein, which is synthesized in the liver (1-3). Factor IX is activated by either factor XIa or the factor VIIa/tissue factor/phospholipid complex. Cleavage between the EGF and the activation peptide yields the intermediate IXa, which is subsequently converted to the fully active form IXa β by cleavage between the activation peptide and the catalytic domain. The NH₂-terminal light chain (GLA and EGF domains) remains covalently attached to the COOH-terminal heavy chain by a disulfide bond. The serine protease catalytic triad (Ser-365, His 221, Asp-269) is located in the heavy chain. Factor IXa β is the catalytic component of the "intrinsic factor Xase complex" (factor VIIIa/IXa/Ca²⁺/phospholipid), which proteolytically activates factor X to factor Xa.

Reagent

Haematologic Technologies' factor IX deficient plasma is prepared from citrated "coagulation normal" human plasma that has been immunodepleted of factor IX so that the activity of factor IX remaining is <1%. Other coagulation factor values along with PT, aPTT, and turbidity measurements are determined and reported on each lot's Certificate of Analysis.

Assay Ranges			
Fibrinogen	150-575 mg/dL	Factor X	>50%
Factor II	>50%	Factor XI	>50%
Factor V	>50%	Factor XII	>50%
Factor VII	>50%	Turbidity (reported)	A320, A400, A530, A650
Factor VIII	>50%	aPTT	reported
Factor IX	<1%	PT	reported

Storage and Handling

Haematologic Technologies' deficient plasmas have a five (5)-year expiration when stored continuously at -70°C.

This product is of human blood/plasma origin. Although the starting material has been tested and found negative for HIV-1 antigen(s), antibodies to HIV and HCV, and non-reactive for HbsAg, extreme caution should be used when handling this material.

Related Reagents from Haematologic Technologies

- Human Factor IX (Cat. #HCIX-0040)
- Bovine Factor IX (Cat. #BCIX-1040)
- Murine Factor IX (Cat. #MCIX-5040)
- Human Factor IXa (Cat. #HCIXA-0050)
- Bovine Factor IXa (Cat. #BCIXA-1050)
- Goat anti-Human Factor IX (Cat. #PAHFIX-G)
- Anti-Human Factor IX (Cat. #AHIX-5041)

1. Thompson, A.R., Blood, 67, 565 (1986).

2. Hedner, U., et al., In Hemostasis and Thrombosis, 2nd edition, ed. R.W. Colman, J. Hirsh, V.J. Marder, E.W., Salzman, pp. 39-47. J.P. Lippincott Co, Philadelphia, 1987.

3. Fujikawa, K., Davie, E.W., Methods in Enzymology, 45, 74 (1976).