



PROTHROMBIN DEFICIENT PLASMA

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

Intended Use

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

Summary of Prothrombin

Prothrombin is a vitamin K-dependent plasma protein that is synthesized in the liver (1). The mature single chain protein circulates in plasma as a zymogen and, during coagulation, is proteolytically activated to the potent serine protease α -thrombin. This proteolysis is catalyzed by the prothrombinase enzyme complex. During activation, human prothrombin is cleaved at Arg273-Thr274 and at Arg323-Ser324 to yield a "pro" fragment (fragment 1.2) and thrombin, the latter of which is composed of two chains covalently linked by a disulfide bond.

Reagent

Haematologic Technologies' prothrombin deficient plasma is prepared from citrated "coagulation normal" human plasma that has been immunodepleted of prothrombin so that the activity of prothrombin 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	50-150%
Factor II	<1%	Factor XI	50-150%
Factor V	50-150%	Factor XII	50-150%
Factor VII	50-150%	Turbidity (reported)	A320, A400, A530, A650
Factor VIII	50-150%	aPTT	reported
Factor IX	50-150%	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 Prothrombin (Cat. #HCP-0010)
- Bovine Prothrombin (Cat. #BCP-1010)
- Murine Prothrombin (Cat. #MCP-5010)
- Sheep anti-Human Prothrombin (Cat #PAHFII-S)
- Sheep anti-Mouse Prothrombin (Cat. #PAMFII-S)
- Anti-Human Prothrombin (Cat. #AHP-5013)

1. Mann, K.G., et al., Methods in Enzymology, 45, 156 (1976).