



FACTOR XII DEFICIENT PLASMA

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

Intended Use

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

Summary of Factor XII

Factor XII (XII) (Hageman Factor) is a single chain ($M_r=78,000$) glycoprotein zymogen that circulates in plasma at a concentration of 40 mg/ml (1-5). Reciprocal activation of XII to the active serine protease factor XIIa (XIIa) by kallikrein is central to initiation of the intrinsic coagulation pathway. Surface bound α -XIIa in turn activates factor XI to XIa. Secondary cleavage of α -XIIa by kallikrein yields β -XIIa, which catalyzes solution phase activation of kallikrein, factor VII and the classical complement cascade.

Reagent

Haematologic Technologies' factor XII deficient plasma is prepared from citrated "coagulation normal" human plasma that has been immunodepleted of factor XII so that the activity of factor XII 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	<1%
Factor VII	>50%	Turbidity (reported)	A320, A400, A530, A650
Factor VIII	>50%	aPTT	reported
Factor IX	>50%	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 XII (Cat. #HCXII-0155)
- Goat anti-Human Factor XII (Cat. #PAHFXII-G)
- Anti-Human Factor XII (Cat. #AHXI-5155)

1. Schmaier, A.H., et al., in Hemostasis and Thrombosis, ed. R.W. Colman, J. Hirsh, V.J. Marder and E.W. Salzman, pp 18-38, J.B. Lippincott Company, Philadelphia, 1987.
2. Griffin, J.H. and Cochrane, C.G., Methods Enzymol., 45, 56-65 (1976).
3. Saito, H., et al., J Lab Clin., 88, 506 (1976).
4. McMullen, B.A. and Fujikawa, N., J. Biol. Chem., 260, 5328 (1985).
5. Davie, E.W., in Hemostasis and Thrombosis, ed. R.W. Colman, J. Hirsh, V.J. Marder and E.W. Salzman, pp 242-267, J.B. Lippincott Company, Philadelphia, 1987.