Factor 11, Plasmathromboplastin

General:

Factor 11 (FXI) is produced by the liver and circulates as a homo-dimer in its inactive form. The plasma half-life of FXI is approximately 52 hours. The zymogen factor is activated into factor XIa by factor XIIa (FXIIa), thrombin, and it is also autocatalytic, and FXI is a member of the "contact pathway" due to activation by FXIIa (with includes HMWK, prekallikrein, factor XII, factor XI and factor IX).

Factor XIa activates factor IX by selectively cleaving arg-ala and arg-val peptide bonds. Factor IXa, in turn, activates factor X.

Inhibitors of factor XIa include protein Z-dependent protease inhibitor (ZPI, a member of the serine protease inhibitor/serpin class of proteins), which is independent of protein Z (its action on factor X, however, is protein Z-dependent, hence its name).

Deficiency of factor XI causes the rare Hemophilia C; this mainly occurs in Ashkenazi Jews and is believed to affect approximately 8% of that population, of both sexes. The condition has been described in other populations at around 1% of cases. It is an autosomal recessive disorder. There is little spontaneous bleeding, but surgical procedures may cause excessive blood loss, and prophylaxis is required. Low levels of factor XI also occur in many other disease states, including Noonan syndrome.

High levels of factor XI have been implicated in thrombosis, although it is uncertain what determines these levels and how serious the procoagulant state is.

Material:	3.0 ml citrate plasma frozen
TAT:	7-10 days*
Method:	Coagulation test
Units:	%
Ref.- range:	70 - 120

For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit
http://www.fml-dubai.com/parameter-listings/

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