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## Factor X<sub>a</sub> (Activated Factor X) for Anti-Factor X<sub>a</sub> Test

–Factor X<sub>a</sub> is the proteolytic enzyme derived from bovine plasma, and it cleaves prothrombin to form thrombin. It is a glycoprotein having a molecular weight of 40,000. One Factor X<sub>a</sub> Unit is the amount of activated endogenous Factor X (55,000 Da when nonactivated) that is contained in 1 mL of normal plasma. Russell's viper venom is used to activate the enzyme, and is then removed. The preparation is stabilized and lyophilized.

Factor X<sub>a</sub> is free of thrombin at the concentration used in the test. When tested against pure fibrinogen, no clotting takes place within 24 hours.

It has not less than 40 Factor X<sub>a</sub> Units per mg of protein, and exhibits 90% homogeneity when tested by disk electrophoresis.

One Factor X<sub>a</sub> Unit per mL gives a 15-second clotting time when tested in the following manner. Mix 0.1 mL of a saturated solution of cephalin (derived from rabbit brain-acetone powder or from an equivalent amount of rabbit brain thromboplastin) in 0.1 mL of citrated bovine plasma and 0.1 mL of 0.025 M calcium chloride. Immediately add 0.1 mL of a solution of factor X<sub>a</sub> (1 in 10), and incubate at 37°.

**Auxiliary Information** - Please [check for your question in the FAQs](#) before contacting USP.

Topic/Question	Contact	Expert Committee
FACTOR XA (ACTIVATED FACTOR X) FOR ANTI-FACTOR XA TEST	<a href="#">Margareth R.C. Marques</a> Principal Scientific Liaison	HDQ Headquarters

**Most Recently Appeared In:**

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