

## Factor XIIIa Activity Assay Kit (Colorimetric)

### Product Information

**Cat**

Kit-1062

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**Description**

Factor XIII or fibrin stabilizing factor (EC 2.3.2.13) is an enzyme involved in the blood coagulation system that crosslinks fibrin. Factor XIII is a transglutaminase that circulates in the plasma as a heterotetramer of two catalytic "A" subunits and two carrier "B" subunits. Factor XIII is activated by thrombin in the presence of calcium which leads to the release of the activation peptide, followed by the dissociation of carrier subunits. The activated Factor XIII (XIIIa) acts on fibrin (Factor Ia) to form  $\gamma$ -glutamyl-lysyl amide cross links between fibrin molecules leading to the formation of an insoluble clot. The deficiency of Factor XIII affects fibrin clot stability and bleeding disorders. Factor XIIIa activity assay kit utilizes the transglutaminase activity of factor XIIIa to cross link an amine-containing substrate to glutamine-containing substrate resulting in the loss of ammonia which can be quantitatively measured by a colorimetric assay. The kit is easy-to-use and can detect Factor XIIIa (as low as 0.1 Loewy U) from plasma and purified protein samples.

**Applications**

Measurement of Factor XIIIa activity in plasma samples and purified/crude enzyme preparations

**Storage**

-20°C

**Shipping**

Gel Pack

**Size**

100 assays

**Kit Components**

## Factor XIIIa Activity Assay Kit (Colorimetric)

FXIIIa Assay Buffer; FXIIIa Activation Buffer (4X); FXIIIa Reaction Buffer (4X); FXIIIa Detection Buffer (2X); FXIIIa Probe; Human Factor XIIIa (0.5 Loewy U/μl); NH<sub>4</sub>Cl Standard (10 mM); FXIIIa Inhibitor (Iodoacetamide)

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**Detection method** Colorimetric (Absorbance 340 nm)

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### Features & Benefits

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Simple, rapid & convenient assay to measure Factor XIIIa;  
Includes Positive Control and Inhibitor (Iodoacetamide)

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