

## Human Factor XII



## Informations

A proenzyme or zymogen is a protein precursor of an enzyme which can give, after activation, an active enzyme. Factor XII (FXII) is a glycoprotein synthesized by the liver.

FXII participates in the contact phase which initiates the intrinsic pathway of coagulation.

Activated on contact with a negatively charged surface, it becomes capable of activating prekallikrein and kallikrein (amplified by KHPM) then FXI to FXIa in the presence of KHPM.

The FXIa thus formed activates the FXII in FXIIa, amplifying the reaction.

Reference	Presentation	Format
9-HCXII-0155	Vial	100 µg
9-HCXII-0155-1	Vial	1 mg

**Origin : Human Blood / Plasma**

**Structure : single chain organized into 6 domains based on sequence homology**

**Formulation : 50 % / Glycerol / 4 mM Sodium Acetate, 150 mM NaCl, pH 5.3 (v/v)**

MW(Da) : 80 000

Extinction coef. : 14.0

Isoelectric point : 6.8



## Advantages

The vast majority of zymogens is pure (without additives) with > 95 % purity SDS-PAGE.  
No additive or preservative.

## Characteristics

All proteins are accompanied by product information sheets which describe proper storage conditions. In order that we may warrant product stability, it is imperative that these storage conditions be maintained at all times. Many of our protein preparations are formulated in 50 % (vol / vol) glycerol/H<sub>2</sub>O which will remain in fluid phase during storage at -20° C. This preferred method of storage yields the greatest protein stability while still allowing access to the stock protein sample without repeated thawing and freezing steps. All products which are formulated with either glycerol/H<sub>2</sub>O or aqueous buffer are delivered in microcentrifuge tubes. By briefly centrifuging the samples in their original containers, complete recovery of the sample at the bottom of the tube will be accomplished. Temperatures lower than -30° C should be avoided in order to prevent a phase transition. When preparing to make a dilution of the stock sample, remove the sample from storage at -20° C and place on ice for a brief period of time (5-10 min). The sample will become less viscous and thus easier to pipette. Never allow protein solutions to remain at room temperature for excessive periods of time. Elevated temperatures may enhance the rate of protein degradation. Avoid storing or maintaining dilute protein samples for a long period of time. In general, purified proteins are inherently more stable in concentrated form. Many proteins are «sticky» by nature. To avoid losing protein due to adsorption, extremely dilute protein samples should be prepared in buffers containing excipients such as bovine serum albumin, polyethylene glycol, or gelatin.