

Factor XIII (Human)

0.25 mg

Ref#: HF13
Lot#: xxxxxx
Exp. Date: xxxx-xx



For Research Use Only
Not for Use in Diagnostic Procedures
For *in-vitro* Use Only

Description:	Factor XIII (Human)
Format:	Frozen in 50 mM Tris / 100 mM NaCl / 1 mM EDTA / 10u/mL Aprotinin / 20% Glycerol / pH 7.4
Host:	Human
Storage:	Store at $\leq -60^{\circ}\text{C}$
Volume:	1 vial containing 0.032 mL
Total Protein:	0.25 mg
Concentration:	7.74 mg/mL by Absorbance; Extinction Coefficient $E^{1\%}_{280} = 13.8$
Activity:	3618.00 Loewy Units/mg
Molecular weight:	320,000 daltons

Human Factor XIII is a tetramer composed of two pairs of chains held together by noncovalent bonds. After activation of the zymogen via Thrombin to its active enzyme form, Factor XIIIa is responsible for catalyzing the formation of covalent bridges between fibrin units to increase the elasticity of the clot network. The resulting cross-linked fibrin is very insoluble and resistant to lysis.

The Human Factor XIII is >94% as judged by SDS-PAGE. One plasma equivalent unit (PEU) is equal to about 108 Loewy units.

The above protein was purified from Human plasma that was tested and found negative by FDA accepted methods for Anti-HIV 1/2, Anti-HTLV I & II, HBsAg, Anti-HCV, Syphilis, HBC Ab, HIV-1 p24 Ag or HIV-1 RNA, HCV RNA and HBV RNA. Donors are screened for CJD (Creutzfeld-Jakob Disease).