

Fibrinogen (Human) Plasminogen depleted, 1.0 g



Ref#: HFG1
Lot#: xxxxxx
Exp. Date: xxxx-xx

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

Description:	Fibrinogen (Human) - Plasminogen depleted
Format:	Lyophilized in 20 mM Sodium citrate-HCl / pH 7.2
Host:	Human
Storage:	Store between +2 and +8°C After reconstitution aliquot into a useful (one time use) size and freeze at ≤-60°C
Reconstitution:	We recommend hydrating the protein with warmed sterile water or buffer to the original volume. The hydration should take place in 37°C water bath to ensure all protein solubilizes
Volume:	1 vial containing 22.422 mL
Total Protein:	1.0 g
Concentration:	44.60 mg/mL before lyophilisation by Absorbance; Extinction Coefficient $E^{1\%}_{280} = 15.1$
Activity:	100% Clottable
Molecular weight:	340,000 daltons

Fibrinogen is an abundant plasma protein (5-10 μ M) synthesized in the liver. The intact protein has a molecular weight of 340 kDa and is composed of 3 pairs of disulphide-bound polypeptide chains named $\text{A}\alpha$, $\text{B}\beta$ and γ . Fibrinogen is a triglobular protein consisting of a central E domain and terminal D domains. Proteolysis by thrombin results in release of Fibrinopeptide A (FPA, $\text{A}\alpha$ 1-16) followed by Fibrinopeptide B (FPB, $\text{B}\beta$ 1-14) and the fibrin monomers that result polymerize in a half-overlap fashion to form insoluble fibrin fibrils. The chains of fibrin are referred to as α , β and γ , due to the removal of FPA and FPB. The polymerised fibrin is subsequently stabilized by the transglutaminase activated Factor XIII that forms amide linkages between γ chains and, to a lesser extent, α chains of the fibrin molecules. Proteolysis of fibrinogen by plasmin initially liberates C-terminal residues from the $\text{A}\alpha$ chain to produce fragment X (intact D-E-D, which is still clottable).

The human Fibrinogen - Plasminogen depleted, is homogeneous as judged on a 4-20% gradient gel. Plasminogen, was depleted using affinity chromatography.

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).