## Fibrinogen (Human) Plasminogen depleted, 5.0 g

Ref#: HFG1-5 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 at or below -60°C
Thawing:	Thaw in a 37°C water bath. After thawing aliquot into a useful (one time use) size and re- freeze at ≤-60°C
Volume:	1 vial containing 114 <b>.416 mL</b>
Total Protein:	5.0 g
Concentration:	<b>43.70 mg/mL</b> 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 uM) 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 A $\alpha$ , B $\beta$  and  $\gamma$ . 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, A $\alpha$ 1-16) followed by Fibrinopeptide B (FPB, 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  $\alpha$ ,  $\beta$  and  $\gamma$ , 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  $\gamma$  chains and, to a lesser extent,  $\alpha$  chains of the fibrin molecules. Proteolysis of fibrinogen by plasmin initially liberates C-terminal residues from the 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).