

# Fibrinogen (Human)

## Plasminogen, vWF depleted, 1.00 g

Ref#: HFG2  
Lot#: xxxxxx  
Exp. Date: xxxx-xx



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

<b>Description:</b>	Fibrinogen (Human) - Plasminogen and von Willebrand Factor depleted
<b>Format:</b>	Lyophilized in 20 mM Sodium citrate-HCl / pH 7.2
<b>Host:</b>	Human
<b>Storage:</b>	Store between +2 and +8°C After reconstitution aliquot into a useful (one time use) size and freeze at ≤-60°C
<b>Reconstitution:</b>	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
<b>Volume:</b>	1 vial containing 24.432 mL
<b>Total Protein:</b>	1.00 g
<b>Concentration:</b>	40.93 mg/mL before lyophilisation by Absorbance; Extinction Coefficient $E^{1\%}_{280} = 15.1$
<b>Activity:</b>	100% Clottable
<b>Molecular weight:</b>	340,000 daltons

Fibrinogen is an abundant plasma protein (5-10  $\mu$ 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  $A\alpha$ ,  $B\beta$  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, vWF depleted, is homogeneous as judged on a 4-20% gradient gel. Plasminogen and von Willebrand Factor were 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).