Fibrinogen (Bovine)
Plasminogen depleted, 1.0 g

Ref#: BFG1
Lot#: xxxxxx
Exp. Date: xxxx-xx

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

Description:	Fibrinogen (Bovine) - Plasminogen depleted
Format:	Lyophilized in 20 mM Sodium citrate-HCl / pH 7.2
Host:	Bovine
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 24.172 mL
Total Protein:	1.0 g
Concentration:	41.37 mg/mL before lyophilisation by Absorbance; Extinction Coefficient $E^{1\%}_{280}$ = 15.1
Activity:	100% Clottable
Molecular weight:	330,000 daltons

Fibrinogen is an abundant plasma protein (5-10 uM) synthesized in the liver. The intact protein has a molecular weight of 330 kDa and is composed of 3 pairs of disulphide-bound polypeptide chains named Aα, Bβ 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, Aα1-16) followed by Fibrinopeptide B (FPB, Bβ1-14) 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 Aα chain to produce Fragment X (intact D-E-D, which is still clottable).

The bovine Fibrinogen - Plasminogen depleted, is homogeneous as judged on a 4-20% gradient gel. Plasminogen, was depleted using a lysine-sepharose column.

All bovine material is from US cows </= 30 months of age.