Creative Enzymes®

Native Bovine Fibrinogen

Cat. No. NATE-1595

Lot. No. (See product label)

Introduction

Description	Fibrinogen is an acute phase protein that is part of the coagulation cascade of proteins. The end result of the cascade is the production of thrombin that converts fibrinogen to fibrin. Thrombin rapidly proteolyzes fibrinogen, releasing fibrinopeptide A. The loss of this small peptide is not sufficient to make the resulting fibrin molecule insoluble, but it tends to form complexes with adjacent fibrin and fibrinogen molecules. Thrombin then cleaves a second peptide, fibrinopeptide B, from fibrin and the fibrin monomers formed then polymerize spontaneously to form an insoluble gel. The polymerized fibrin is held together by noncovalent and electrostatic forces and stabilized by the transamidating enzyme, factor XIIIa, that is produced by the action of thrombin on factor XIII. The insoluble fibrin aggregates (clots) and aggregated platelets then block the damaged blood vessel and prevent further bleeding. The amount of fibrinogen in the plasma can serve as a nonspecific indicator of whether or not an inflammatory process is present in the body. Fibrinogen from any mammalian source will be cleaved by thrombin from any mammalian source.
Synonyms	Factor I; 9001-32-5

Product Information

Species	Bovine
Source	Bovine plasma
Appearance	White to Off-White lyophilized powder
CAS No.	9001-32-5
Molecular Weight	α-chain mol wt 63.5 kDa β-chain mol wt 56 kDa γ chain mol wt 47 kDa (about 4% carbohydrate content) soluble dimer mol wt 340 kDa
Thermal stability	< 50°C

Storage and Shipping Information

Storage	2-8°C