SAMARTH BIOLOGICALS

Fibrinogen from bovine plasma

Description:

Fibrinogen is a 340 KDa glycoprotein synthesised in the liver. Fibrinogen is a hexamer containing two sets of three different chains (α, β, and γ), linked to each other by disulfide bonds. The conversion of fibrinogen to fibrin occurs in several steps. First, thrombin cleaves the N-terminus of the fibrinogen alpha and beta chains to fibrinopeptide A and B respectively. The resulting fibrin monomers polymerize end to end to from protofibrils which in turn associate laterally to form fibrin fibers. In a final step, the fibrin fibers associate to form the fibrin gel.

Application:

A fibrinogen activity test by itself or along with other tests when someone has unexplained or prolonged bleeding, thrombosis, or an abnormal PT and PTT test result. The test can also be performed when a person has symptoms of or is undergoing treatment for DIC or abnormal fibrinolysis.

MW: α-chain mol wt 63.5 kDa, β-chain mol wt 56 kDa ,γ chain mol wt 47 kDa (about 4% carbohydrate content) and soluble dimer mol wt 340 kDa.
Activity: 65-85% protein (≥75% of protein is clottable).
Storage and form: −20°C (Lyophilized powder).
Package size: Bulk.
Reference:

1. Andrades, M.E., et al., Glycolaldehyde induces fibrinogen post-translational modification, delay in clotting and resistance to enzymatic digestion. Chem. Biol.Interact. 180, 478-84, (2009).
2. Blombäck B, Hessel B, Hogg D, Therkildsen L (October 1978). "A two-step fibrinogen--fibrin transition in blood coagulation". Nature 275 (5680): 501–5.
3. Hermans J, McDonagh J (January 1982). "Fibrin: structure and interactions". Semin. Thromb. Hemost. 8 (1): 11–24.