



Sheep anti Human Fibrinogen polyclonal antibody (CABT-L391)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	This antibody is specific for Fibrinogen as demonstrated by immunoelectrophoresis and ELISA.
Target	Fibrinogen
Immunogen	Human fibrinogen purified from plasma.
Isotype	IgG
Source/Host	Sheep
Species Reactivity	Human
Purification	Affinity purified
Conjugate	Unconjugated
Applications	IEP, ELISA
Format	Liquid
Size	0.5 mg
Buffer	10 mM HEPES, pH 7.4, 150 mM NaCl, 50% (v/v) glycerol.
Preservative	None
Storage	Store between -10 and -20°C. Product will become viscous but will not freeze. Avoid storage in frost-free freezers. Keep vial tightly capped. Allow product to warm to room temperature and gently mix before use.

BACKGROUND

Introduction

Fibrinogen is an abundant plasma protein (5-10 uM) produced 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 α , B β 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, A α 1-16) followed by Fibrinopeptide B (FPB, B β 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 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 A α chain to produce fragment X (intact D-E-D, which is still clottable). Fragment X is further degraded to non-clottable fragments Y (D-E) and D. Fragment Y can be digested into its constituent D and E fragments. Digestion of non-crosslinked fibrin with plasmin is very similar to the digestion of fibrinogen, which results in production of fragments D and E. Degradation of crosslinked fibrin by plasmin results in fragment DD (D-Dimer consisting of the D domains of 2 fibrin molecules crosslinked via the γ chains), fragment E (central E domain) as well as DDE in which fragment E is non-covalently associated with DD. For human crosslinked fibrin, the relative weights of the cleavage fragments produced are: 184 kDa for fragment DD, 92 kDa for D, 50 kDa for E, 1.54 kDa for FPA and 1.57 kDa for FPB.

Keywords

fibrinogen alpha chain;FGA;Fib2;fibrinogen, A alpha polypeptide;

GENE INFORMATION

Entrez Gene ID

[2243](#)

UniProt ID

[P02671](#)
