# abcam

### Product datasheet

### Mouse Fibrinogen ELISA Kit ab108844

### 4 References 2 Images

Overview						
Product name Detection method	Mouse Fibrinogen ELISA Kit Colorimetric					
Precision					Intra-assay	
	Sample	n	Mean	SD	CV%	
	Overall				5.2%	
	Inter-assa					
	Sample	n	Mean	SD	CV%	
	Overall				10%	
Sample type	Plasma					
Assay type	Competitive					
Sensitivity	= 0.6 µg/ml					
Range	0.625 µg/ml - 20 µg/ml					
Recovery	99 %					
Assay time	3h 0m					
Assay duration	Multiple steps standard assay					
Species reactivity	Reacts with: Mouse					
Product overview	Abcam's Fibrinogen Mouse <i>in vitro</i> competitive ELISA (enzyme-linked immunosorbent assay) kit is designed for the quantitative measurement of mouse fibrinogen in plasma.					

A Fibrinogen specific antibody has been precoated onto 96-well plates and blocked. Standards or test samples are added to the wells and subsequently a biotinylated Fibrinogen is added and then followed by washing with wash buffer. Streptavidin-Peroxidase Complex is added and unbound conjugates are washed away with wash buffer. TMB is then used to visualize Streptavidin-Peroxidase enzymatic reaction. TMB is catalyzed by Streptavidin-Peroxidase to produce a blue color product that changes into yellow after adding acidic stop solution. The density of yellow coloration is inversely proportional to the amount of Fibrinogen captured in plate.

### The entire kit may be stored at -20°C for long term storage before reconstitution - Avoid repeated freeze-thaw cycles.

Platform

Microplate

#### Properties

**Function** 

**Tissue specificity** 

Storage instructions Store at -20°C. Please refer to protocols.				
Components		1 x 96 tests		
100X Streptavidin-Peroxidase Con	1 x 80µl			
10X Diluent N Concentrate	1 x 30ml			
2X Biotinylated Mouse Fibrinogen	1 vial			
20X Wash Buffer Concentrate	1 x 30ml			
Chromogen Substrate	1 x 7ml			
Fibrinogen Microplate (12 x 8 well s	1 unit			
Fibrinogen Standard		1 vial		
Sealing Tapes		3 units		
Stop Solution	1 x 11ml			
Sealing Tapes		3 units		

## Fibrinogen has a double function: yielding monomers that polymerize into fibrin and acting as a cofactor in platelet aggregation. Plasma.

Involvement in disease Defects in FGA are a cause of congenital afibrinogenemia (CAFBN) [MIM:202400]. This is a rare autosomal recessive disorder characterized by bleeding that varies from mild to severe and by complete absence or extremely low levels of plasma and platelet fibrinogen. Note=The majority of cases of afibrinogenemia are due to truncating mutations. Variations in position Arg-35 (the site of cleavage of fibrinopeptide a by thrombin) leads to alpha-dysfibrinogenemias. Defects in FGA are a cause of amyloidosis type 8 (AMYL8) [MIM:105200]; also known as systemic non-neuropathic amyloidosis or Ostertag-type amyloidosis. AMYL8 is a hereditary generalized amyloidosis due to deposition of apolipoprotein A1, fibrinogen and lysozyme amyloids. Viscera are particularly affected. There is no involvement of the nervous system. Clinical features include renal amyloidosis resulting in nephrotic syndrome, arterial hypertension, hepatosplenomegaly, cholestasis, petechial skin rash. **Sequence similarities** Contains 1 fibrinogen C-terminal domain. Domain A long coiled coil structure formed by 3 polypeptide chains connects the central nodule to the Cterminal domains (distal nodules). The long C-terminal ends of the alpha chains fold back, contributing a fourth strand to the coiled coil structure. Post-translational The alpha chain is not glycosylated. modifications Forms F13A-mediated cross-links between a glutamine and the epsilon-amino group of a lysine

residue, forming fibronectin-fibrinogen heteropolymers.

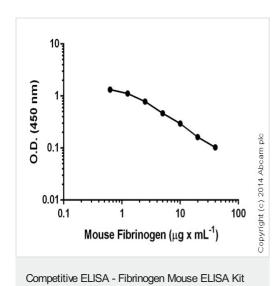
About one-third of the alpha chains in the molecules in blood were found to be phosphorylated. Conversion of fibrinogen to fibrin is triggered by thrombin, which cleaves fibrinopeptides A and B from alpha and beta chains, and thus exposes the N-terminal polymerization sites responsible for the formation of the soft clot. The soft clot is converted into the hard clot by factor XIIIA which catalyzes the epsilon-(gamma-glutamyl)lysine cross-linking between gamma chains (stronger) and between alpha chains (weaker) of different monomers. Phosphorylation sites are present in the extracellular medium.

#### **Cellular localization**

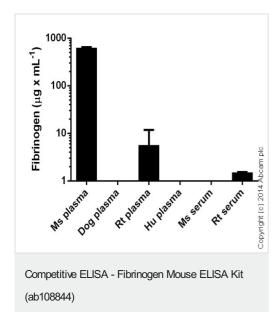
Secreted.

#### Images

(ab108844)



Standard curve: mean of duplicates (+/- SD) with background reads subtracted



Fibrinogen measured in biological fluids showing quantity (ug) per mL of tested sample. Samples diluted 1-500 fold.

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