

## BACKGROUND

Fibrinogen is a plasma glycoprotein mainly synthesized by hepatocytes that circulates as a 340-kDa hexamer consisting of pairs of A $\alpha$ , B $\beta$ , and  $\gamma$  chains. Its 3-dimensional structure is characterized by 2 lateral nodules (each composed of 2 globular subdomains) joined to a central nodule by coiled-coil triple-helix structures. The A $\alpha$ , B $\beta$ , and  $\gamma$  chains are encoded by 3 different genes (*FGA*, *FGB*, and *FGG*, respectively) clustered on chromosome 4q28. Fibrinogen takes part in hemostasis by forming the fibrin clot and by mediating platelet aggregation.<sup>1</sup> Moreover; it is a class II acute-phase reacting protein involved in the acute phase response to injury and stress.<sup>2</sup>

FGB (fibrinogen beta chain) is the beta component of fibrinogen. Following vascular injury, fibrinogen is cleaved by thrombin to form fibrin which is the most abundant component of blood clots. In addition, various cleavage products of fibrinogen and fibrin regulate cell adhesion and spreading, display vasoconstrictor and chemotactic activities, and are mitogens for several cell types. Mutations in FGB gene lead to several disorders, including afibrinogenemia, dysfibrinogenemia, hypodysfibrinogenemia and thrombotic tendency.<sup>3</sup>

### References:

1. Doolittle, R.F. et al: Ann. Rev. Biochem. 53:195-229, 1984
2. Kushner, I.: Method Enzymol. 163:373-83, 1988
3. Mammen, E.F.:Semin Thromb Hemost. 9:1-72, 1983

## TECHNICAL INFORMATION

### Source:

FGB Antibody is a mouse monoclonal antibody raised against purified recombinant human FGB fragments expressed in *E. coli*.

### Specificity and Sensitivity:

This antibody detects endogenous FGB proteins without cross-reactivity with other family members.

**Storage Buffer:** PBS and 30% glycerol

### Storage:

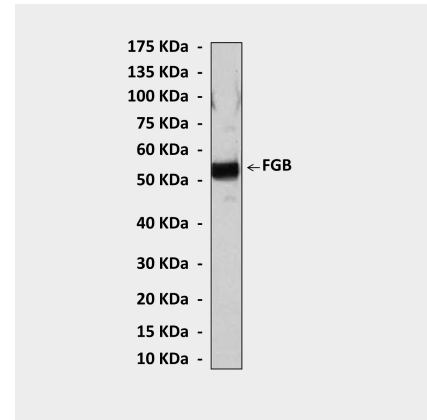
Store at -20°C for at least one year. Store at 4°C for frequent use. Avoid repeated freeze-thaw cycles.

## APPLICATIONS

Application:	*Dilution:
WB	1:1000
IP	1:50
IHC	n/d
ICC	n/d
FACS	n/d

\*Optimal dilutions must be determined by end user.

## QUALITY CONTROL DATA



Western Blot detection of FGB proteins in human plasma using FGB Antibody.

