## **PRODUCT** INFORMATION



Fibrinogen (a chain) Monoclonal Antibody (Clone 6D6) Item No. 18793

### **Overview and Properties**

Contents:	This vial contains 100 $\mu$ g of protein G-purified antibody.
Synonym:	FGA
Immunogen:	Human fibrinogen (α chain)
<b>Species Reactivity:</b>	(+) Human; other species not tested
Uniprot No.:	P02671
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥3 years
Storage Buffer:	PBS, pH 7.2, with 50% glycerol, 0.1% BSA, and 0.02% sodium azide
Clone:	6D6
Host:	Mouse
Isotype:	lgG1
Applications:	Western blot (WB); the recommended starting dilution 1:200. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Image



Lane 2: Human Fibrinogen (50 ng) Lane 3: Human Fibrinogen (100 ng) Lane 4: Human Fibrinogen (200 ng)

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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#### CAYMAN CHEMICAL

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# **PRODUCT** INFORMATION



#### Description

Fibrinogen is a hexameric glycoprotein that has roles in coagulation and hemostasis.<sup>1,2</sup> It is comprised of two sets of A $\alpha$ , B $\beta$ , and  $\gamma$  polypeptide chains encoded by *FGA*, *FGB*, and *FGG*, respectively, in humans.<sup>1</sup> Fibrinogen is synthesized in hepatocytes and secreted into the plasma. Following thrombin-mediated cleavage of N-terminal fibrinopeptides from the A $\alpha$  and B $\beta$  chains, yielding the  $\alpha$  and  $\beta$  chains, respectively, fibrinogen assembles into fibrin protofibrils and then mature fibers, which provide structure and viscoelasticity to blood clots.<sup>2-4</sup> Mutations in *FGA*, *FGB*, or *FGG* have been found in patients with afibrinogenemia or hypofibrinogenemia.<sup>1</sup> Elevated plasma fibrinogen levels are associated with an increased risk of cardiovascular disease.<sup>5</sup> Immune complexes containing citrullinated fibrinogen have been found in patients with anti-citrullinated protein antibody-positive rheumatoid arthritis.<sup>6</sup> Cayman's Fibrinogen ( $\alpha$  chain) Monoclonal Antibody (Clone 6D6) can be used for Western blot (WB) applications. The antibody recognizes the  $\alpha$  chain of fibrinogen at 70 kDa from human samples.

#### References

- 1. de Moerloose, P., Casini, A., and Neerman-Arbez, M. Congenital fibrinogen disorders: An update. *Semin. Thromb. Hemost.* **39(6)**, 585-595 (2013).
- Pieters, M. and Wolberg, A.S. Fibrinogen and fibrin: An illustrated review. Res. Pract. Thromb. Haemost. 3(2), 161-172 (2019).
- 3. Mosesson, M.W. Fibrinogen and fibrin structure and functions. J. Thromb. Haemost. 3(8), 1894-1904 (2005).
- 4. Weisel, J.W. and Litvinov, R.I. Fibrin formation, structure and properties. *Subcell. Biochem.* **82**, 405-456 (2017).
- 5. Kamath, S. and Lip, G.Y.H. Fibrinogen: Biochemistry, epidemiology and determinants. Q. J. M. 96(10), 711-729 (2003).
- 6. Sokolove, J., Zhao, X., Chandra, P.E., *et al.* Immune complexes containing citrullinated fibrinogen costimulate macrophages via toll-like receptor 4 and Fcγ receptor. *Arthritis Rheum.* **63(1)**, 53-62 (2011).

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