

# PRODUCT INFORMATION



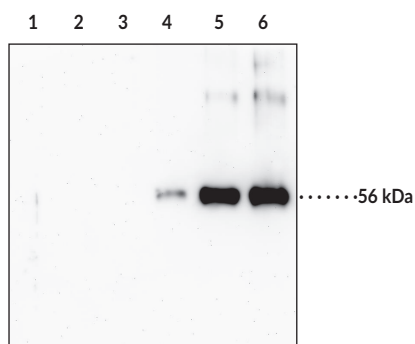
## Citrullinated Fibrinogen Monoclonal Antibody (Clone 10E9.3)

Item No. 17088

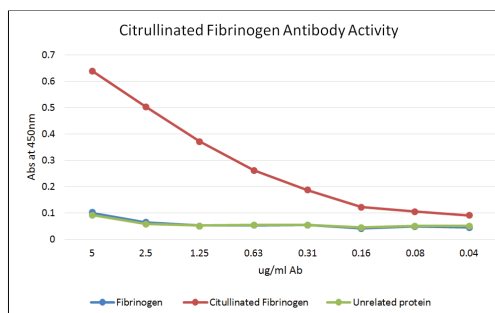
### Overview and Properties

<b>Contents:</b>	This vial contains 100 µg of protein G-purified antibody.
<b>Immunogen:</b>	Human citrullinated fibrinogen
<b>Cross Reactivity:</b>	(-) Human fibrinogen
<b>Species Reactivity:</b>	(+) Human; other species not tested
<b>Form:</b>	Liquid
<b>Storage:</b>	-20°C (as supplied)
<b>Stability:</b>	≥3 years
<b>Storage Buffer:</b>	PBS, pH 7.2, with 50% glycerol and 0.02% sodium azide
<b>Clone:</b>	10E9.3
<b>Host:</b>	Mouse
<b>Isotype:</b>	IgG2b
<b>Applications:</b>	ELISA and Western blot (WB); the recommended starting dilution for ELISA is 1:200 and 1:1,000 for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

### Images



Lane 1: Fibrinogen (35 ng)  
Lane 2: Fibrinogen (70 ng)  
Lane 3: Fibrinogen (350 ng)  
Lane 4: Citrullinated human fibrinogen (Item No. 400076) (35 ng)  
Lane 5: Citrullinated human fibrinogen (Item No. 400076) (70 ng)  
Lane 6: Citrullinated human fibrinogen (Item No. 400076) (350 ng)



Maxisorp ELISA plates were coated with 1 µg/ml of the indicated protein/peptide. The plates were blocked with 1% BSA and probed with a titration of the citrullinated fibrinogen antibody (5-0.04 µg/ml).

**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.

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## Description

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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> Fibrinogen can be citrullinated by protein arginine deiminase 2 (PAD2) and PAD4.<sup>6</sup> Immune complexes containing citrullinated fibrinogen have been found in patients with anti-citrullinated protein antibody-positive rheumatoid arthritis.<sup>7</sup> Cayman's Citrullinated Fibrinogen Monoclonal Antibody (Clone 10E9.3) can be used for ELISA and Western blot (WB) applications. The antibody recognizes citrullinated fibrinogen at 56 kDa from human samples.

## References

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2. Pieters, M. and Wolberg, A.S. Fibrinogen and fibrin: An illustrated review. *Res. Pract. Thromb. Haemost.* **3(2)**, 161-172 (2019).
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7. Sokolove, J., Zhao, X., Chandra, P.E., *et al.* Immune complexes containing citrullinated fibrinogen costimulate macrophages via toll-like receptor 4 and Fc $\gamma$  receptor. *Arthritis Rheum.* **63(1)**, 53-62 (2011).

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