PRODUCT INFORMATION

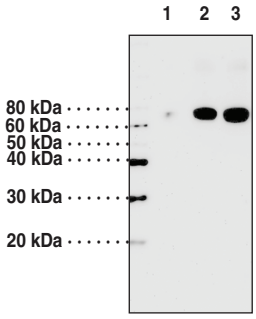
Fibrinogen (α chain) Polyclonal Antibody

Item No. 18033

Overview and Properties

Contents:	This vial contains 500 µl of peptide affinity-purified antibody.
Synonyms:	FBG, FG, FGA
Immunogen:	Peptide from the C-terminal region of human fibrinogen (α chain)
Cross Reactivity:	(+) Fibrinogen (α chain); (-) Fibrinogen (β chain), fibrinogen (γ chain)
Species Reactivity:	(+) Human; other species not tested.
Uniprot No.:	P02671
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	PBS, pH 7.2 with 50% glycerol and 0.02% sodium azide
Host:	Rabbit
Applications:	Western blot (WB); the recommended starting dilution is 1:200. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Image



Lane 1: Human Fibrinogen (Item No. 16088) (1 ng)
Lane 2: Human Fibrinogen (Item No. 16088) (5 ng)
Lane 3: Human Fibrinogen (Item No. 16088) (10 ng)

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Description

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