SANTA CRUZ BIOTECHNOLOGY, INC.

Fibrinogen α (1F7)): sc-51892

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The plasma glycoprotein Fibrinogen is synthesized in the liver and comprises three structurally different subunits: α, β and γ. Fibrinogen is important in platelet aggregation, the final step of the coagulation cascade (i.e. the formation of Fibrin) and determination of plasma viscosity and erythrocyte aggregation. It is both constitutively expressed and inducible during an acute phase reaction. Hemostasis following tissue injury deploys essential plasma procoagulants (Prothrombin and Factors X, IX, V and VIII), which are involved in a blood coagulation cascade leading to the formation of insoluble Fibrin clots and the promotion of platelet aggregation. Following vascular injury, Fibrinogen is cleaved by Thrombin to form Fibrin, which is the most abundant component of blood clots. The cleavage products of Fibrinogen regulate cell adhesion and spreading, display vasoconstrictor and chemotactic activities and are mitogens for several cell types.

REFERENCES

1. Davie, E.W. and Fujikawa, K. 1975. Basic mechanisms in blood coagulation. Annu. Rev. Biochem. 44: 799-829.
2. Davie, E.W., et al. 1991. The coagulation cascade: initiation, maintenance, and regulation. Biochemistry 30: 10363-10370.
3. Danesh, J., et al. 1998. Association of Fibrinogen, C-reactive protein, Albumin, or leukocyte count with coronary heart disease: meta-analyses of prospective studies. JAMA 279: 1477-1482.
4. Lowe, G., et al. 2000. Blood rheology, cardiovascular risk factors, and cardiovascular disease: the west of Scotland coronary prevention study. Thromb. Haemost. 84: 553-558.
5. Reinhart, W.H. 2003. Fibrinogen—marker or mediator of vascular disease? Vasc. Med. 8: 211-216.
6. Online Mendelian Inheritance in Man, OMIM™. 2004. Johns Hopkins University, Baltimore, MD. MIM Number: 34820. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
7. LocusLink Report (LocusID: 2243). http://www.ncbi.nlm.nih.gov/LocusLink/

CHROMOSOMAL LOCATION

Genetic locus: FGA (human) mapping to 4q31.3; Fga (mouse) mapping to 3 E3.

SOURCE

Fibrinogen α (1F7) is a mouse monoclonal antibody raised against fibrinopeptide A of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

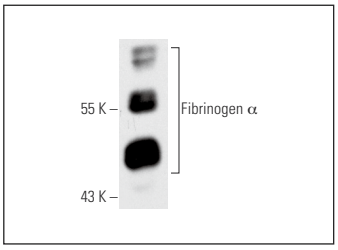
Fibrinogen α (1F7) is recommended for detection of fibrinopeptide A region in the α chain of Fibrinogen and free fibrinopeptide A of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for Fibrinogen α siRNA (h): sc-40409, Fibrinogen α siRNA (m): sc-40410, Fibrinogen α shRNA Plasmid (h): sc-40409-SH, Fibrinogen α shRNA Plasmid (m): sc-40410-SH, Fibrinogen α shRNA (h) Lentiviral Particles: sc-40409-V and Fibrinogen α shRNA (m) Lentiviral Particles: sc-40410-V.

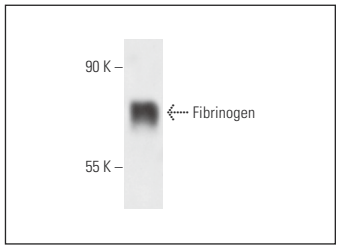
Molecular Weight of Fibrinogen α: 60 kDa.

Positive Controls: human platelet extract: sc-363773.

DATA



Fibrinogen α (1F7): sc-51892. Western blot analysis of Fibrinogen α expression in human platelet whole cell lysate.



Fibrinogen (1F7): sc-51892. Western blot analysis of human recombinant Fibrinogen.

SELECT PRODUCT CITATIONS

1. Chen, X., et al. 2010. Quantitative organellar proteomics analysis of rough endoplasmic reticulum from normal and acute pancreatitis rat pancreas. J. Proteome Res. 9: 885-896.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.