SANTA CRUZ BIOTECHNOLOGY, INC.

Fibrinogen (15H12): sc-51890

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

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4. Lowe, G., Rumley, A., Norrie, J., Ford, I., Shepherd, J., Cobbe, S., Macfarlane, P. and Packard, C. Blood rheology, cardiovascular risk factors, and cardiovascular disease: the west of Scotland coronary prevention study. Thromb. Haemost. 84: 553-558.
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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/
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CHROMOSOMAL LOCATION

Genetic locus: FGA (human) mapping to 4q32.1; FGB (human) mapping to 4q32.1; FGG (human) mapping to 4q32.1.

SOURCE

Fibrinogen (15H12) is a mouse monoclonal antibody raised against fibrin degradation products of human origin.

STORAGE

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

PROTOCOLS

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

PRODUCT

Each vial contains 100 µg IgG_1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Fibrinogen (15H12) is recommended for detection of whole Fibrinogen, consisting of a dimer of three pairs of non-identical chains, α, β and γ, and Fibrin degradation products of 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)].

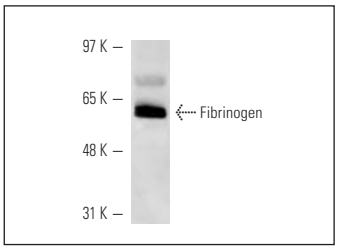
Molecular Weight of Fibrinogen: 60 kDa.

Positive Controls: platelet whole cell lysate.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



Fibrinogen (15H12): sc-51890. Western blot analysis of Fibrinogen expression in platelet extract.

RESEARCH USE

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