SANTA CRUZ BIOTECHNOLOGY, INC.

Fibrinogen α (S-16): sc-33917

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.

CHROMOSOMAL LOCATION

Genetic locus: FGA (human) mapping to 4q31.3.

SOURCE

Fibrinogen α (S-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Fibrinogen α of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-33917 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

RESEARCH USE

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

APPLICATIONS

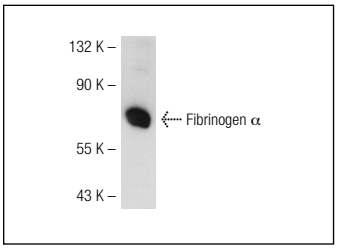
Fibrinogen α (S-16) is recommended for detection of Fibrinogen isoforms α and α-E of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

Molecular Weight of Fibrinogen α: 60 kDa.

Positive Controls: human platelet whole cell lysate: sc-363773.

DATA



Fibrinogen α (S-16): sc-33917. Western blot analysis of Fibrinogen α expression in human platelet whole cell lysate.

SELECT PRODUCT CITATIONS

1. Chen, Z., et al. 2010. Susceptibility to chronic thromboembolic pulmonary hypertension may be conferred by miR-759 via its targeted interaction with polymorphic fibrinogen α gene. Hum. Genet. 128: 443-452.
2. Soon, A.S., et al. 2011. Modulation of fibrin matrix properties via knob: hole affinity interactions using peptide-PEG conjugates. Biomaterials 32: 4406-4414.

PROTOCOLS

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