# Fibrinogen β (H-270): sc-33581



The Power to Question

#### **BACKGROUND**

The plasma glycoprotein Fibrinogen is synthesized in the liver and comprises three structurally different subunits:  $\alpha$ ,  $\beta$  and  $\gamma$ . 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**

- Davie, E.W. and Fujikawa, K. 1975. Basic mechanisms in blood coagulation. Annu. Rev. Biochem. 44: 799-829.
- Davie, E.W., et al. 1991. The coagulation cascade: initiation, maintenance, and regulation. Biochemistry 30: 10363-10370.
- 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.
- 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.
- 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/

## CHROMOSOMAL LOCATION

Genetic locus: FGB (human) mapping to 4q31.3; Fgb (mouse) mapping to 3 E3.

# SOURCE

Fibrinogen  $\beta$  (H-270) is a rabbit polyclonal antibody raised against amino acids 31-300 mapping near the N-terminus of Fibrinogen  $\beta$  of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  lgG 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.

### **RESEARCH USE**

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

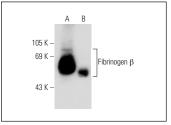
#### **APPLICATIONS**

Fibrinogen  $\beta$  (H-270) is recommended for detection of Fibrinogen  $\beta$  and Fibrinopeptide B of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

Molecular Weight of Fibrinogen β: 67 kDa.

Positive Controls: c4 whole cell lysate: sc-364186.

#### **DATA**



Fibrinogen  $\beta$  (H-270): sc-33581. Western blot analysis of Fibrinogen  $\beta$  expression in c4 whole cell lysate (**A**) and full length human recombinant Fibrinogen  $\beta$  (**B**).

# **SELECT PRODUCT CITATIONS**

- Zhao, X., et al. 2010. Hyperfibrinogenemia and prolonged clotting times in a Turner syndrome patient with hepatocellular carcinoma. Blood Coagul. Fibrinolysis 21: 398-405.
- 2. Klein, C., et al. 2011. Transcriptional profiling of equine conceptuses reveals new aspects of embryo-maternal communication in the horse. Biol. Reprod. 84: 872-885.
- 3. Luczak, M., et al. 2011. Chronic kidney disease-related atherosclerosis-proteomic studies of blood plasma. Proteome Sci. 9: 25.

## **PROTOCOLS**

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



Try **Fibrinogen**  $\beta$  **(D-4)**: **sc-271035** or **Fibrinogen**  $\beta$  **(C-1)**: **sc-271017**, our highly recommended monoclonal aternatives to Fibrinogen  $\beta$  (H-270).

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