

Fibrinogen β (C-20): sc-18029

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., et al. 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: 134820. 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 β (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Fibrinogen β of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-18029 P, (100 μ g 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.

APPLICATIONS

Fibrinogen β (C-20) is recommended for detection of Fibrinogen β of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

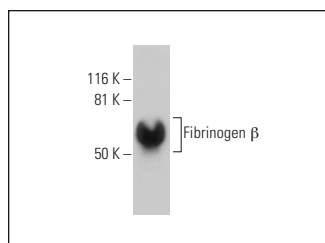
Fibrinogen β (C-20) is also recommended for detection of Fibrinogen β in additional species, including equine.

Suitable for use as control antibody for Fibrinogen β siRNA (h): sc-37096, Fibrinogen β siRNA (m): sc-37097, Fibrinogen β shRNA Plasmid (h): sc-37096-SH, Fibrinogen β shRNA Plasmid (m): sc-37097-SH, Fibrinogen β shRNA (h) Lentiviral Particles: sc-37096-V and Fibrinogen β shRNA (m) Lentiviral Particles: sc-37097-V.

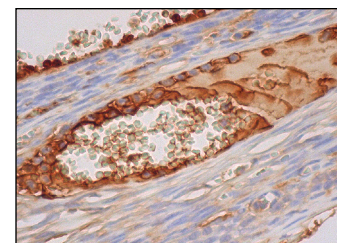
Molecular Weight of Fibrinogen β : 67 kDa.

Positive Controls: c4 whole cell lysate: sc-364186 or human plasma lysate: sc-364374.

DATA



Fibrinogen β (C-20): sc-18029. Western blot analysis of Fibrinogen β in human plasma.



Fibrinogen β (C-20): sc-18029. Immunoperoxidase staining of formalin fixed, paraffin-embedded human blood vessel tissue showing plasma and extracellular matrix staining.

SELECT PRODUCT CITATIONS

1. Shimamura, N., et al. 2006. Inhibition of Integrin α V/ β 3 ameliorates focal cerebral ischemic damage in the rat middle cerebral artery occlusion model. *Stroke* 37: 1902-1909.
2. Shimamura, N., et al. 2006. Inhibition of Integrin α V/ β 3 reduces blood-brain barrier breakdown in focal ischemia in rats. *J. Neurosci. Res.* 84: 1837-1847.

RESEARCH USE

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



Try **Fibrinogen β (D-4): sc-271035** or **Fibrinogen β (C-1): sc-271017**, our highly recommended monoclonal alternatives to Fibrinogen β (C-20).