

Fibrinogen α (H-300): sc-33580

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.

CHROMOSOMAL LOCATION

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

SOURCE

Fibrinogen α (H-300) is a rabbit polyclonal antibody raised against amino acids 21-320 mapping near the N-terminus of Fibrinogen α 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.

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 (H-300) is recommended for detection of Fibrinogen α , Fibrinogen α -E and Fibrinopeptide A 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).

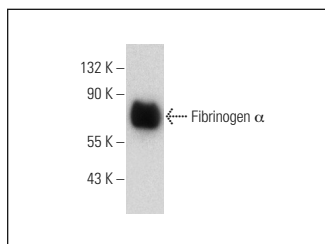
Molecular Weight of Fibrinogen α : 60 kDa.

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

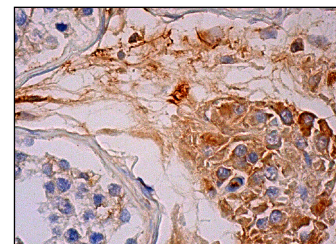
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Fibrinogen α (H-300): sc-33580. Western blot analysis of full length human recombinant Fibrinogen α .



Fibrinogen α (H-300): sc-33580. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing extracellular and cytoplasmic staining of Leydig cells.

SELECT PRODUCT CITATIONS

1. 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.
2. Ahn, J.H., et al. 2011. Antiangiogenic kringle derived from human plasminogen and apolipoprotein(a) inhibit fibrinolysis through a mechanism that requires a functional lysine-binding site. *Biol. Chem.* 392: 347-356.
3. Mosesson, M.W., et al. 2013. Evidence for covalent linkage between some plasma α 2-antiplasmin molecules and A α chains of circulating fibrinogen. *J. Thromb. Haemost.* 11: 995-998.

PROTOCOLS

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



Try **Fibrinogen α (C-7): sc-398806** or **Fibrinogen α (A-6): sc-166968**, our highly recommended monoclonal alternatives to Fibrinogen α (H-300).