

Polyclonal Antibody to Fibrinogen - Biotin

Alternate names: FGA, FGB, FGG

Catalog No.: R1152BS

Quantity: 0.1 mg

Concentration: 1.0 mg/ml (by UV absorbance at 280 nm)

Background: Fibrinogen is the main protein of blood coagulation system. It is a large protein and it consists of two identical subunits that contain three polypeptide chains: alpha, beta and gamma. All chains are connected with each other by a number of disulfide bonds. Fibrinopeptides A (1 to 16 amino acids) and B (1 to 17 amino acids) are released by thrombin from the N terminal parts of alpha and beta chains, respectively. In this way fibrinogen is converted into fibrin, which by means of polymerization forms a fibrin clot. Fibrinogen clotting underlies pathogenesis of MI, thromboembolism and thromboses of arteries and veins, since fibrin is the main substrate for thrombus formation. Fibrinogen activation is also involved in pathogenesis of inflammation, tumor growth and many other diseases.

The normal fibrinogen concentration in plasma is about 3 mg/ml. The elevated level of fibrinogen in patient's blood is regarded as an independent risk factor for cardiovascular diseases. An increase in blood fibrinogen concentration was shown to be a strong predictor of coronary heart disease (Sonel A. et al, and Rapold H.J. et al). All these facts make fibrinogen an important parameter in the diagnosis of cardiovascular diseases.

Host: Goat

Immunogen: Fibrinogen from Human plasma.

Format: **State:** Lyophilized purified Ig fraction

Purification: Delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer

Buffer System: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Preservatives: 0.01% (w/v) Sodium Azide

Stabilizers: 10 mg/ml BSA (immunoglobulin protease free)

Label: Biotin – 10-20 moles biotin per mole of IgG

Reconstitution: Restore with 0.1 ml of deionized water (or equivalent).

Applications: **Western blot:** 1/500-1/2,500.

Immunohistochemistry: 1/200-1/1,000.

ELISA: 1/2,000-1/10,000.

This antibody has been assayed against 1.0 µg of Fibrinogen in a standard capture ELISA using peroxidase conjugated streptavidin and ABTS as a substrate for 30 minutes at room temperature. A working dilution of 1/50,000 to 1/250,000 of the reconstitution concentration is suggested.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:

This product detects Human Fibrinogen. Cross reactivity against Fibrinogen from other sources is unknown.

Immunoelectrophoresis give a single precipitin arc against anti-Biotin, anti-Goat serum as well as purified and partially purified Fibrinogen [Human plasma].

Storage:

Store lyophilized at 2-8°C for 6 months or at -20°C long term.

After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

Pictures:

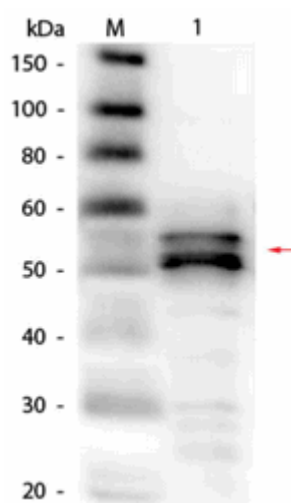
Western blot of biotin conjugated goat anti-Fibrinogen antibody Cat.-No. R1152B. Lane 1: Fibrinogen (human plasma).

Load: 50 ng per lane. Primary antibody:

Biotin conjugated goat anti-Fibrinogen antibody (human plasma) at 1/1,000 overnight at 4°C. Secondary antibody:

HRP streptavidin secondary antibody at 1/40,000 for 30 min at RT. Blocking buffer for 30 minutes at RT.

Predicted/observed size: 56 kDa, 56 kDa for Fibrinogen β -chain.

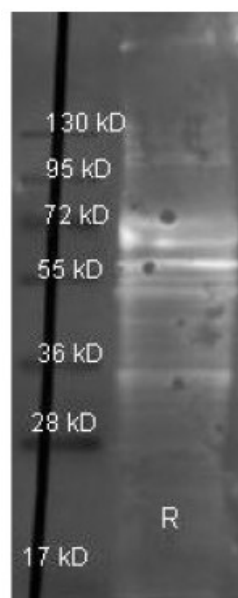

Western Blot of Goat anti-Fibrinogen antibody.

Lane 1: Fibrinogen under reducing conditions. Lane 2: none. Load:

1 μ g per lane. Primary antibody:

Fibrinogen antibody at 1/3000 for overnight at 4°C. Secondary antibody:

Dylight 488 conjugated Donkey anti goat secondary antibody at 1/10,000 for 45 min at RT. Block: TBS/MB-070 1 hr RT.



Immunohistochemistry of Goat Anti-Fibrinogen antibody. Tissue: human liver tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: Fibrinogen antibody at 1:500 for 1 h at RT. Secondary antibody: Peroxidase goat secondary antibody at 1/10,000 for 45 min at RT. Localization: Fibrinogen is localized in plasma. Staining: Fibrinogen as precipitated red signal with hematoxylin purple nuclear counterstain.

