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 et al. 2000; Rapold et al. 1989).

**Immunogen**
Purified, full length native fibrinogen Q9UE34

**Host**
Chicken

**Clonality**
Polyclonal

**Purity**
Affinity purified IgY

**Format**
Liquid in 0.15M sodium chloride, 0.02M sodium phosphate, 0.1% sodium azide, pH 7.2

**Quantity**
100 µl (0.2mg/ml)

**Storage**
Store at 4°C; make aliquots to avoid working with a stock. Please, remember to spin tubes briefly prior to opening them to avoid any losses that might occur from liquid material adhering to the cap or sides of the tubes.

**Tested applications**
Flow cytometry (Flow cyt)

**Related products**
IMS06-038-312 | Fibrinogen | biotinylated antibody

**Additional information**
The IgY fraction is isolated by a two-step PEG precipitation procedure followed by ammonium sulphate precipitation. Labelled with fluorescein. Affinity purified on human fibrinogen agarose.

**Application information**

**Recommended dilution**
1: 10 (FC)

**Expected | apparent MW**
24 kDa

**Confirmed reactivity**
Human, Porcine, Rat, Rabbit

**Predicted reactivity**
Bovine, Mouse

**Not reactive in**
No confirmed exceptions from predicted reactivity are currently known.

**Selected references**


**Application example**

**Flow cytometry**
Suitable for detection of platelet activation by flow cytometry. Blood samples were collected in 5 mL sodium citrate tubes (367704, Becton Dickinson, Rutherford, NJ). Platelet-rich plasma was isolated by centrifugation at room temperature. 5 ul platelet-rich plasma was
added to polystyrene tubes containing 100 µl HEPES-buffer (137 mmol/L NaCl, 2.7 mmol/L KCl, 1 mmol/L MgCl\textsubscript{2}, 5.6 mmol/L glucose, 1 g/L bovine serum albumin, and 20 mmol/L HEPES, pH 7.4) and 10 µl FITC labelled chicken antibody. The samples were incubated for 10 minutes at room temperature and were then diluted and fixed with 1000 µl ice-cold PBS (0.02 mol/L Na\textsubscript{2}HPO\textsubscript{4}, 0.15 mol/L NaCl, 0.02% NaN\textsubscript{3}, pH 7.2), containing 1% p-formaldehyde. No washing steps were used. The samples were analyzed utilising an Epics Profile XL-MCL cytometer (Coulter Electronics, Hialeah, FL). Data processing from 5,000 platelets was carried out with the XL software (Coulter Electronics).