

**Mouse Anti-Fibrinogen [4F7]: MC0179, MC0179RTU7**

**Intended Use:** For Research Use Only

**Description:** 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.

**Specifications:**

Clone: 4F7  
Source: Mouse  
Isotype: IgG1  
Reactivity: Human  
Localization: Secreted  
Formulation: Purified antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN<sub>3</sub>)  
Storage: Store at 2°- 8°C  
Applications: IHC, IF  
Package:

| Description             | Catalog No. | Size |
|-------------------------|-------------|------|
| Fibrinogen Concentrated | MC0179      | 1 ml |
| Fibrinogen Prediluted   | MC0179RTU7  | 7 ml |

**IHC Procedure\*:**

Positive Control Tissue: Kidney, liver  
Concentrated Dilution: 10-100  
Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
Incubation Time and Temp: 30-60 minutes @ RT  
Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.

**References:**

1. Increased thrombosis susceptibility and altered fibrin formation in STAT5-deficient mice. Nordstrom SM, et al. Blood 116:5724-33, 2010.
2. Evidence for covalent linkage between some plasma α<sub>2</sub>-antiplasmin molecules and Aα chains of circulating fibrinogen. Mosesson, MW. et al. J. Thromb. Haemost. 11: 995-998, 2013.
3. Antiangiogenic kringle derived from human plasminogen and apolipoprotein(a) inhibit fibrinolysis through a mechanism that requires a functional lysine-binding site. Ahn, JH. et al. Biol. Chem. 392: 347-356, 2011.

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Rev. A