

Product Specification Sheet
Rat Plasma Fibrinogen Antibodies

Cat. # FIBN12-A

Rabbit Anti-Rat Plasma Fibrinogen IgG

SIZE: 100 ug

Fibrinogen (factor I) is a soluble plasma glycoprotein, synthesized by the liver, that is converted by thrombin into fibrin during blood coagulation. Processes in the coagulation cascade activate the zymogen prothrombin to the serine protease thrombin, which is responsible for converting fibrinogen into fibrin. Fibrin is then cross linked by factor XIII to form a clot. FXIIIa stabilizes fibrin further by incorporation of the fibrinolysis inhibitors alpha-2-antiplasmin and TAFI (thrombin activatable fibrinolysis inhibitor, procarboxypeptidase B), and binding to several adhesive proteins of various cells. Both the activation of Factor XIII by thrombin and plasminogen activator (t-PA) are catalyzed by fibrin.

Human fibrinogen is a dimer consisting of two identical halves, each containing three different polypeptides: alpha-chain (63.5 kDa), beta-chain (56 kDa), and gamma-chain (47 kDa). The three polypeptides are joined together by disulfide bonds. At the N-terminus, the three chains are linked together by a dimeric disulfide knot (DSK), which results in a configuration of α , β , γ . Fibrinogen is a glycoprotein containing approximately 4% carbohydrate. The concentration in blood plasma is 1.5-4.0 g/L or about 7 μ M. In its natural form, fibrinogen can form bridges between platelets, by binding to their GpIIb/IIIa surface membrane proteins; however its major function is as the precursor to fibrin. Fibrinogen is a hexamer containing two sets of three different chains (α , β , and γ), linked to each other by disulfide bonds. On the fibrinogen α and β chains, there is a small peptide sequence (called a fibrinopeptide). These small peptides are what prevent fibrinogen from spontaneously forming polymers with itself.

Source of Antigen and Antibodies

Antigen	Purified rat fibrinogen protein
Antibody host/type	Rabbit, polyclonal affinity purified IgG, Cat # FIBN12-A, unlabeled supplied in PBS, pH 7.4, 10.1% BSA and 0.05 azide (see lot sp concn on the vial)
Secondary Ab	Goat Anti-rabbit IgG-HRP cat # 20320 (AP, biotin, FITC conjugates also available)
Negative Control Ab	# 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as -ve control
	Store frozen in suitable aliquots. Do not freeze, thaw, or heat repeatedly

Form & Storage

Aff Pure (purified)

100 ul/vial (see lot sp. concn on the vial)
solution, PBS pH 7.5, 0.1% BSA, 0.05% azide
lyophilized in the same buffer r

Reconstitute powder in 100 ul water

Storage

Short-term: unopened, undiluted vials for less than a week at 4oC.

Long-term: at -20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at -20oC or below.

Shipping: 4oC for solutions and room temp for powder.

Recommended Usage

Western Blotting (1-2 ug/ml using ECL).

ELISA (0.1-1 ug/ml as detecting antibody).

Histochemistry: not tested. We recommend the use of 2-10 ug/ml of antibody in paraformaldehyde-fixed, paraffin embedded sections.

Specificity & Cross-reactivity

Anti-rat fibrinogen has been tested with rat protein. Antibody crossreactivity in various species is not established. ADI has anti-human fibrinogen antibody as well (#FIBN11-A). Purified rat fibrinogen can be used as positive control for ELISA and Western.

General References: Muszbek L (2008) Cardiovascular & Hematological Agents in Medicinal Chemistry 6 (3): 190-205; Fries D (2009) Current Opinion in Anaesthesiology 22 (2): 267-74; Hermans J (1982) Semin. Thromb. Hemost. 8, 11-24

*This product is for In vitro research use only.

Related material available from ADI

FIBN11-A	Anti-Human Plasma Fibrinogen IgG
FIBN11-BT	Anti-Human Plasma Fibrinogen IgG, Biotin conjugate
FIBN11-HRP	Anti-Human Plasma Fibrinogen IgG, HRP conjugate
FIBN12-A	Anti-Rat Fibrinogen, IgG, aff pure
FIBN15-N-10	Human Plasma Fibrinogen purified, >90%
FIBN16-N-50	Human plasma Fibrinogen fragment D, purified, >90%
FIBN17-N-50	Human plasma Fibrinogen fragment E, purified, >90%
FIBN18-N-100	Mouse plasma Fibrinogen, purified, >90% clottable
FIBN19-N-100	Mouse plasma Fibrinogen, purified, >90% clottable
SP-52245-1	Fibrinogen γ -chain dodecapeptide
SP-52246-5	Fibrinogen-binding Peptide
SP-88462-1	Fibrinogen β -Chain (24-42)
SP-88463-1	Fibrinogen Related Peptide
SP-88975-1	Fibrinogen γ - Chain (117 - 133)
FIBN12-A	100914A

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