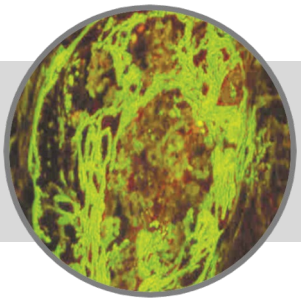
Fibrinogen / FITC, RPab



CE IVD

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Intended Use
For In Vitro Diagnostic Use.

Immunogen
KLH conjugated synthetic peptide corresponding to the N-terminus of human FGA.

Summary and Explanation
Fibrinogen (factor I) is a glycoprotein that circulates in the blood of vertebrates. During tissue and vascular injury, it is converted enzymatically by thrombin to fibrin and subsequently to a fibrin-based blood clot. Fibrinogen functions primarily to occlude blood vessels and thereby stop excessive bleeding. Fibrin also mediates blood platelet and endothelial cell spreading, tissue fibroblast proliferation, capillary tube formation, and angiogenesis and thereby functions to promote tissue revascularization, wound healing, and tissue repair.

Several disorders (Congenital afibrinogenemia, hypofibrinogenemia, Fibrinogen storage disease, Hereditary fibrinogen Aα-Chain amyloidosis, Congenital hypodysfibrinogenemia, Cryofibrinogenemia, acquired hypofibrinogenemia, Chronic Kidney Disease, etc.) in the quantity and/or quality of fibrinogen cause pathological bleeding, pathological blood clotting, and/or the deposition of fibrinogen in the liver, kidneys, and other tissues. Chronic kidney disease (CKD) patients have increased rates of bleeding as well as thrombosis. Fibrinogen and platelets combine to generate a mature clot, but in CKD platelets are dysfunctional.

Antibody Type	Rabbit Polyclonal	**Clone**	Polyclonal
Isotype	IgG	**Reactivity**	Paraffin, Frozen
Localization	Cytoplasmatic	**Control**	Breast, Testis, Kidney, Pancreas, Salivary Gland, Skin, Fallopian Tube
	Species Reactivity	Human	

Precautions
1. For professional users only. Results should be interpreted by a qualified medical professional.
2. This product contains <0.1% sodium azide (NaN_3) as a preservative. Ensure proper handling procedures are used with this reagent.
3. Always wear personal protective equipment such as laboratory coat, goggles and gloves when handling reagents.
4. Dispose of unused solution with copious amount of water.
5. Do not ingest reagent. If reagent is ingested, seek medical advice immediately.
6. Avoid contact with eyes. If contact occurs, flush with large quantities of water.
7. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar).
8. For additional safety information refer to Safety Data Sheet for this product.
9. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories" (see References in this document).

Presentation
The Fibrinogen/FITC is a purified rabbit polyclonal antibody labeled with FITC diluted in a Tris Buffered Saline solution (pH 7.2) containing stabilizing proteins and preserved with sodium azide. It is provided in liquid form.

Catalog No.	*Antibody Type*	*Dilution*	*Volume/Qty*
BSB-3004-3	Tinto Predilute	Ready-to-Use	3.0 mL
BSB-3004-7	Tinto Predilute	Ready-to-Use	7.0 mL
BSB-3004-15	Tinto Predilute	Ready-to-Use	15.0 mL
BSB-3004-05	Concentrate	1:25 - 1:100	0.5 mL
BSB-3004-1	Concentrate	1:25 - 1:100	1.0 mL

Control Slides Available

Catalog No.	*Quantity*
BSB-3004-CS	5 slides

Storage Store at 2-8°C in the dark

Stability
This product is stable up to the expiration date on the product label. Do not use after expiration date listed on package label. Temperature fluctuations should be avoided. Store appropriately when not in use, and avoid prolonged exposure to room temperature conditions.

Preparation of Working Solution
This FITC antibody is supplied as a concentrated solution and should be further diluted to a working concentration with appropriate antibody diluent. ImmunoDetector Protein Block/Antibody Diluent (BSB 0040 and BSB 0041) is suggested immediately prior to use.

Specimen Preparation
Paraffin sections: The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation for best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using Bio SB ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023), ImmunoDNA Retriever with EDTA (BSB 0030-BSB 0033). See reverse side for complete protocol. Tissue should remain hydrated via use of Bio SB Immuno/DNA Washer solutions (BSB 0029 & BSB 0042).
Frozen sections and cell preparations: The antibody can be used for labeling acetone-fixed frozen sections and acetone-fixed cell preparations.

Preparation for Frozen Tissues Staining Procedure

1. Embed the specimen in OCT inside cryostat.
2. Cut sections at 5 micrrons.
3. Place the section on a positively charged glass slide.
4. Air dry for 30-60 minutes.
5. Fix in acetone 100% for 10 minutes.
6. Air dry for another 10 minutes.

Preparation for FFPE Tissues Staining Procedure

1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positively charged slides such as Bio SB Hydrophilic Plus Slides (BSB 7028).
2. Air dry for 2 hours at 58° C.
3. Deparaffinize, dehydrate and rehydrate tissues.
4. Subject tissues to heat induced epitope retrieval (HIER) using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023) or EDTA (BSB 0030-BSB 0033).
5. Any of three heating methods may be used:

a. TintoRetriever Pressure Cooker or Equivalent

Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA, and place on trivet in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature.

b. TintoRetriever PT Module or Water Bath Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99° C. Incubate for 30-60 minutes.

c. Conventional Steamer Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a steamer, cover and steam for 30-60 minutes.

6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes.
7. Wash slides with ImmunoDNA washer or DI water.
8. For manual staining, perform antibody incubation in the dark at ambient temperature. For automated staining methods, perform antibody incubation according to instrument manufacturer's instructions.
9. Continue IF staining protocol.

Abbreviated Protocol

Step	Incubation Time
Rinse slides in IF wash buffer	5 min
Drain and wipe excess IF wash buffer off slide	
Conduct remaining steps in the dark	
Apply Antibody	30-60 min.
Rinse with 3 changes of IF wash buffer	3x5 min. each
Coverslip with IF mounting medium	

Mounting Protocols

IF:

1. Bring FluoroMounter or FluoroMounter with DAPI to room temperature.
2. Rinse slides with distilled or deionized water.
3. Remove excess of water from slides before laying them flat in the dark.
4. Turn the media bottle upside down before opening the dropper bottle.
5. Apply 1-3 drops of FluoroMounter to each slide making sure the specimen is covered.
6. Incubate 3-5 minutes at room temperature in the dark.
7. Coverslip.
8. Observe under a fluorescent microscope using the appropriate filters.
9. The slides are recommended to be stored at 2-8 ^{0}C in the dark.

Product Limitations

Due to inherent variability present in immunofluorescent procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized and incubation time), optimal performance should be established through the use of positive and negative controls. Results should be interpreted by a qualified medical professional.

References

1. Mosesson MW. "Fibrinogen and fibrin structure and functions". Journal of Thrombosis and Haemostasis. 2005; 3(8): 1894–904.
2. Asselta R, Duga S, Tenchini ML. "The molecular basis of quantitative fibrinogen disorders". Journal of Thrombosis and Haemostasis. 2006; 4 (10): 2115–29.
3. Gillmore JD, et al. "Diagnosis, pathogenesis, treatment, and prognosis of hereditary fibrinogen A alpha-chain amyloidosis". Journal of the American Society of Nephrology : JASN. 2009; 20 (2): 444–51.
4. Nunns, GR, et al. The hypercoagulability paradox of chronic kidney disease: The role of fibrinogen. The American Journal of Surgery 2017; 214 (6):215-1218.
5. U.S. Department of Health and Human Services: Centers for Disease Control and Prevention. Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories. Supplement / Vol. 61, January 6, 2012.

Symbol Key / Légende des symboles/Erläuterung der Symbole

EC REP EMERGO EUROPE Prinsessegracht 20 2514 AP The Hague The Netherlands	Storage Temperature Limites de température Zulässiger Temperaturbereich	Manufacturer Fabricant Hersteller	REF Catalog Number Référence du catalogue Bestellnummer
IVD In Vitro Diagnostic Medical Device Dispositif médical de diagnostic in vitro In-Vitro-Diagnostikum	Read Instructions for Use Consulter les instructions d'utilisation Gebrauchsanweisung beachten	Expiration Date Utiliser jusque Verwendbar bis	LOT Lot Number Code du lot Chargenbezeichnung

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