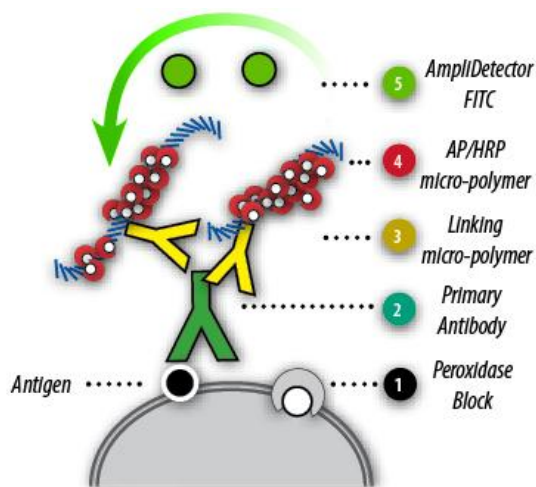


# AmpliDetector Plus FITC RUO



## Intended Use

For Research Use Only.

## Summary and Explanation

The AmpliDetector Plus FITC Kits are intended for the Immunofluorescent (IF) detection of antigens in paraffin-embedded tissue, cryostat sections, blood smears, cytosmears, and cell preparations. The AmpliDetector Plus FITC system has been developed using signal amplification technology to greatly increase the amount of FITC signals. This ensures vivid and easily detectable fluorescent signals for all types of nuclear, cytoplasmic, and membranous antigens, in different types of tissues or cell preparations.

The AmpliDetector Plus FITC system is suitable for use for the detection of mouse and rabbit primary antibodies, both monoclonal and polyclonal. The AmpliDetector Plus FITC kit is optimized for use with Bio SB primary antibodies; however, it should work equally well with antibodies from different vendors, as long as they are optimized.

## Presentation

AmpliDetector Plus FITC is a ready-to-use solution that deposits fluorescein isothiocyanate (FITC) at the site of the antigen-antibody binding.

Kit	Components	Catalog No.	All components
Mouse/Rabbit AmpliDetector Plus FITC	Peroxidase Blocker, Mouse/Rabbit Link, HRP Label, AmpliDetector FITC Solution	BSB-0359-15	15 mL
		BSB-0359-50	50 mL
		BSB-0359-100	100 mL
Mouse/Rabbit AmpliDetector Plus FITC & FluoroMounter	Peroxidase Blocker, Mouse/Rabbit Link, HRP Label, AmpliDetector FITC Solution, FluoroMounter	BSB-0357-15	15 mL
		BSB-0357-50	50 mL
		BSB-0357-100	100 mL

Mouse/Rabbit AmpliDetector Plus FITC & FluoroMounter with DAPI	Peroxidase Blocker, Mouse/Rabbit Link, HRP Label, AmpliDetector FITC Solution, FluoroMounter with DAPI	BSB-0358-15	15 mL
		BSB-0358-50	50 mL
		BSB-0358-100	100 mL

**Storage** Store at 2-8°C

## 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. Adhere to all local laws when disposing of this product.

## Precautions

1. For professional users only. Results should be interpreted by a qualified medical professional.
2. This product contains <0.1% sodium azide (NaN<sub>3</sub>) 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).

## Specimen Preparation

**Paraffin sections:** This product 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) or equivalents. Additionally, TintoDeparaffinator Citrate or EDTA (BSB 0175 - BSB 0178) can be used to deparaffinize, retrieve and hydrate FFPE Tissues. Tissue should remain hydrated using Bio SB Immuno/DNA Washer solutions (BSB 0029 &; BSB 0042) or equivalent.

**Frozen sections and cell preparations:** This product can be used to detect antigens by Immunofluorescence on acetone-fixed frozen sections and acetone-fixed cell preparations.

## Preparation of Working Solution

All components are ready-to-use solutions that do not require any additional preparation.

### Recommended Protocol for FFPE Tissues

1. Cut and mount 3-5-micron formalin-fixed paraffin-embedded tissues on positive charged slides such as Bio SB Hydrophilic Plus Slides (BSB 7028) or TintoDetector Cap Gap Slides (BSB 7006).
2. Air dry for 2 hours at 58° C.
3. Deparaffinize, dehydrate and rehydrate tissues. Additionally, TintoDeparaffinator Citrate or EDTA (BSB 0175 - BSB 0178) can be used to deparaffinize, retrieve and hydrate FFPE 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 or TintoDeparaffinator 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. Release vapor, 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, or TintoDeparaffinator Citrate or EDTA at 95°-99°C. Incubate for 30-60 minutes. Open and immediately transfer slides to room temperature.

#### c. Conventional Steamer Method

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

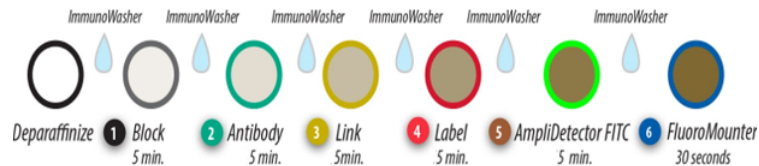
6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA, or in TintoDeparaffinator Citrate or EDTA to room temperature and let stand for 15-20 minutes.
7. For manual staining, perform antibody incubation at ambient temperature. For automated staining methods, perform antibody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

### Recommended Protocol for Frozen Tissues

1. Embed the specimen in OCT inside a cryostat.
2. Cut sections at 4-5 microns.
3. Place the section on a positively charged glass slide.
4. Air dry.
5. Fix in acetone 100% for 2-10 minutes.
6. Air dry.
7. Continue IF staining protocol. Wash slides between each step with ImmunoDNA washer solution.

### Abbreviated Immunofluorescence Protocol

Step	AmpliDetector Plus FITC
Peroxidase Blocker	5 min.
Primary Antibody	5 min.
Mouse/Rabbit Link	5 min.
HRP Label	5 min.
AmpliDetector FITC Solution	5 min.
FluoroMounter/Coverslip	Varies



### Mounting Protocol

1. Bring FluoroMounter (BSB 0157- BSB 0162) or FluoroMounter DAPI (BSB 0163 - BSB 0168) or similar IF mounting media 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 or similar mounting media 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 filter for FITC.
9. The slides are recommended to be stored at 2-8 °C in the dark.

### Product Limitations

Due to inherent variability present in IF 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. U.S. Department of Health and Human Services: Centers for Disease Control and Prevention. Guidelines for Safe WorkPractices in Human and Animal Medical Diagnostic Laboratories. Supplement / Vol. 61, January 6, 2012. <https://www.cdc.gov/mmwr/pdf/other/su6101.pdf>

### Symbol Key / Légende des symboles/Erläuterung der Symbole

	Storage Temperature Limites de température Zulässiger Temperaturbereich		Manufacturer Fabricant Hersteller		Catalog Number Référence du catalogue Bestellnummer
	Read Instructions for Use Consulter les instructions d'utilisation Gebrauchsanweisung beachten		Expiration Date Utiliser jusque Verwendbar bis		Lot Number Code du lot Chargenbezeichnung