# Mouse/Rabbit PolyDetector AP ALK Magenta Detection System





PI 0286, Rev. C DCN: 3133

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## **Intended Use**

For In Vitro Diagnostic Use.

# **Summary and Explanation**

The Mouse/Rabbit PolyDetector Alkaline Phosphatase/ ALK Magenta System is a one-step polymeric detection system that allows for the demonstration of antigens in paraffinembedded tissue, cryostat sections, blood smears, cytosmears, and cell preparations. The PolyDetector kits have been developed using an Anti-Mouse and Anti-Rabbit Link for maximum sensitivity. Our proprietary tandem hyperlabeling technology used to directly conjugate immunoglobulins fragments and HRP enzymes to a biopolymer backbone molecule. This ensures excellent cellular penetration which generates consistent and reproducible immunostaining for all types of nuclear, cytoplasmic and membranous antigens, in different types of tissues and cell preparations.

The PolyDetector AP Blocker is used to block the endogenous Alkaline Phosphatase enzymes that naturally occur in cells and tissue sections without affecting antigens or nucleic acids. The increased sensitivity of the Mouse/Rabbit PolyDetector Alkaline Phosphatase/ALK Magenta Detection System allows for rapid staining procedures without compromising stain quality. The Mouse/Rabbit PolyDetector Alkaline Phosphatase/ALK Magenta Detection System is suitable for use with mouse (IgG and IgM) and rabbit primary monoclonal and polyclonal antibodies. The Mouse/Rabbit PolyDetector Alkaline Phosphatase/ALK Magenta Detection System kits are universal kits and therefore work equally well with tintoprediluted and concentrated antibodies from Bio SB and from different vendors' primaries, as long as they are optimized.

The PolyDetector Alk Magenta, in the presence of Alkaline Phosphatase, gets deposited at the site of the target antigen, producing a magenta color that is partially soluble in organic solvents and therefore care should be taken when mounting with permanent mounting media (please refer to the recommended permanent mounting protocol on reverse).

#### **Presentation**

The Mouse/Rabbit PolyDetector Alkaline Phosphatase/ALK Magenta Detection System contains an AP Blocker, Anti-Mouse/Rabbit Immunoglobulin conjugated to Alkaline Phosphatase, an ALK Magenta Chromogen, an ALK Magenta Activator, and an ALK Magenta Buffer-Substrate. All the components are buffered with stabilizers and an anti-microbial agent.

Catalog No.	Volume/Qty
BSB 0282	15 mL Each
BSB 0283	50 mL Each
BSB 0284	100 mL Each
BSB 0285	200 mL Each
BSB 0286	1000 mL Each

Storage Store at 2-8°C

# Stability

The Mouse/Rabbit PolyDetector AP ALK Magenta Detection System is stable up to the expiration date listed on the product label. Do not use this product after the expiration date listed on the product label. Temperature fluctuations should be avoided. Store appropriately when not in use, and avoid prolonged exposure to room temperature conditions.

#### **Precautions**

- 1 For professional users only. Results should be interpreted by a qualified medical professional.
- Ensure proper handling procedures are used with reagent. Minimize microbial contamination of reagents.
- 3. Always wear proper personal protective equipment such as laboratory coat, goggles and gloves when handling reagents.
- 4. Dispose of unused solution according to local and federal regulations.
- 5. Do not ingest reagent. If reagent is ingested, seek medical advice immediately.
- ${\bf 6. \, Avoid \, contact \, with \, eyes. \, \, If \, contact \, occurs, \, flush \, with \, large \, quantities \, of \, water.}$
- Follow safety precautions for the heating device used for epitope retrieval (TintoRetriever Pressure Cooker (BSB 7008), TintoRetriever PT Module (BSB 7030 or 7033) 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" (1).

# **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. Pretreatment 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). 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).

Frozen sections and cell preparations: This product can be used for labeling acetone-fixed frozen sections and acetone-fixed cell preparations.

### **Preparation of Working Solution**

The AP Blocker and Anti-Mouse/Rabbit Alkaline Phosphatase Label are ready-to-use working solutions and require no further preparation. To prepare a working ALK Magenta Substrate-Chromogen solution, first shake the ALK Magenta Chromogen solution, then add 1 drop of Chromogen to 1 drop of ALK Magenta Activator for each 1 mL of Substrate-Chromogen solution required. Mix the two solutions and then dilute them with 1 mL of the ALK Magenta Buffer-Substrate per 1 mL of working ALK Magenta Substrate-Chromogen required. Use this working solution within 5-10 minutes of preparation.

#### **Recommended Protocol**

- 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.

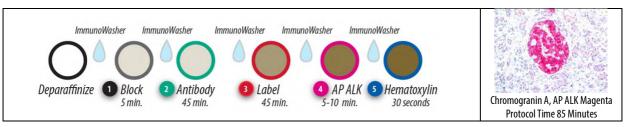
#### c. Conventional Steamer Method

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.
- Continue IHC staining protocol. Wash slides between each step with ImmunoDNA washer solution.

#### Abbreviated Immunohistochemical Protocol

Step	PolyDetector AP
Peroxidase/AP Blocker	5 min.
Primary Antibody	45 min.
AP Label	45 min.
Substrate-Chromogen	10 min.
Counterstain / Coverslip	Varies



## **Mounting Protocol**

For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMounter (BSB 0169-0174) or organic solvent based resin such as PermaMounter (BSB 0094-0097), refer to Pl0174 or Pl0097.

#### **Product Limitations**

Due to inherent variability present in immunohistochemical 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 Work Practices in Human and Animal Medical Diagnostic Laboratories. Supplement / Vol. 61, January 6, 2012.

Symbol Key / Légende des symboles/Erläuterung der Symbole



