# Mouse/Rabbit PolyDetector Plus DAB HRP Brown Detection System



# **Intended Use**

For In Vitro Diagnostic Use.

#### **Summary and Explanation**

The Mouse/Rabbit PolyDetector Plus HRP/DAB System is a 2-step polymeric detection system that allows for the demonstration of antigens in paraffin-embedded 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 label the anti-Link with Fab' 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 Mouse/Rabbit PolyDetector Plus HRP/DAB Detection System is suitable for use with IgG and IgM mouse and IgG rabbit primary antibodies, both monoclonal and polyclonal. The Mouse/Rabbit PolyDetector Plus HRP/DAB Detection System kits are optimized for use with Bio SB primary antibodies; however, they are universal kits and therefore should work equally well with prediluted and concentrated antibodies from different vendors, if they are optimized and properly validated.

#### Presentation

The Mouse/Rabbit PolyDetector Plus DAB HRP Brown Detection System contains a Peroxidase Blocker, an anti-Mouse/Rabbit Link, a Fab HRP Label, a DAB Buffer, and a DAB Chromogen solution. All components are buffered with stabilizers and an anti-microbial agent.

Catalog No.	Volume/Qty	
BSB 0257S	5 mL Each	В
BSB 0257	15 mL Each	В
BSB 0259	50 mL Each	В
BSB 0261	100 mL Each	В
BSB 0263	200 mL Each	В
BSB 0265	1000 mL Each	

**COMPLETE KITS** 

Catalog No.	Volume/Qty
BSB 0267	15 mL Plus Link & HRP Label
BSB 0268	50 mL Plus Link & HRP Label
BSB 0269	100 mL Plus Link & HRP Label
BSB 0270	200 mL Plus Link & HRP Label
BSB 0271	1000 mL Plus Link & HRP Label

Storage Store at 2-8°C

# Stability

The Mouse/Rabbit PolyDetector Plus DAB HRP Brown 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.

2. 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.
- 6. Avoid contact with eyes. If contact occurs, flush with large quantities of water.

7. 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.

#### PI 0265, Rev. H DCN: 3131

# **Preparation of Working Solution**

The PolyDetector Plus Peroxidase Blocker, PolyDetector Plus Link Anti-Mouse/Rabbit, and Anti-Mouse/Rabbit Horseradish Peroxidase Label are ready-to-use working solutions and require no further preparation. The DAB Chromogen is concentrated and needs to be diluted with the DAB buffer solution (1 drop chromogen/1 ml buffer). Prepare the working DAB Substrate Chromogen Solution right before use.

# **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.

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

#### Abbreviated Immunohistochemical Protocol

Step	PolyDetector Plus HRP
Peroxidase/AP Blocker	5 min.
Primary Antibody	30-60 min.
1st Step Detection	15 min.
2nd Step Detection	15 min.
Substrate-Chromogen	5-10 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 PI0174 or PI0097.

# **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 using 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





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