

Stayright™ Periodic Acid Schiff (PAS) Stain Kit (Mucin Stain)

Catalog number: 45910 Unit size: 100 Tests

Component	Storage	Amount (Cat No. 45910)
Component A: Periodic Acid Solution	Refrigerated (2-8 °C)	1 bottle (10 mL)
Component B: Schiff's Reagent	Refrigerated (2-8 °C)	1 bottle (10 mL)
Component C: Modified Mayer's Hematoxylin Solution	Room temperature (10-25 °C)	1 bottle (10 mL)

OVERVIEW

The Stayright™ Periodic Acid Schiff (PAS) Stain Kit (Mucin Stain) is designed for efficient detection of carbohydrate rich structures such as mucopolysaccharides, glycogen, basement membranes, pathological lymphocytes and fungi in fixed tissue sections. It is based on the classic Periodic Acid–Schiff chemistry. This kit employs a sequential three-step staining process: Oxidation of vicinal diols in carbohydrates by Periodic Acid, Color development as Schiff's Reagent reacts to produce a magenta/pink stain, Counterstaining with Modified Mayer's Hematoxylin to render the nuclei blue.

All essential reagents are provided in optimized concentrations for consistent, high-quality performance. Ideal for pathologists and researchers studying mucin-containing tumors, glycogen storage disorders, basement membrane integrity, and fungal infections.

AT A GLANCE

- 1. Deparaffinize and rehydrate the tissue.
- 2. Add Periodic Acid Solution and incubate for 5 minutes at room temperature.
- 3. Wash tissue thrice with distilled water.
- 4. Add Schiff's Reagent and incubate for 15 minutes at room temperature.
- 5. Wash tissue thrice with distilled water.
- 6. Counterstain in Modified Mayer's Hematoxylin Solution for 1 minute at room temperature.
- 7. Wash tissue using tap water for 5 minutes.
- 8. Dehydrate the tissue and mount using xylene based mounting medium.

Important: Bring all reagents to room temperature just prior to use and gently agitate.

SAMPLE EXPERIMENTAL PROTOCOL

Tissue preparation (Deparaffinization and Rehydration):

- 1. Wash slides with Xylene twice for 5 minutes each.
- 2. Wash slides with 100% Ethanol twice for 3 minutes each.
- 3. Wash slides with 95% Ethanol twice for 1 minute each.
- 4. Wash slides with 70% Ethanol once for 1 minute.
- 5. Rinse slides with water for 2 minutes.

Tissue Staining:

- 1. Circle tissue sample with hydrophobic pen.
- 2. Add 100 μ L of Periodic Acid Solution to tissue sample. **Note:** Add enough solution to cover the tissue slide properly.
- 3. Incubate the slides for 5 minutes at room temperature in dark. **Note:** Incubation time can be optimized.
- 4. Rinse slides in 3 changes of distilled water.

- 5. Add 100 µL of Schiff's Reagent to tissue sample. **Note:** Add enough solution to cover the tissue slide properly.
- 6. Incubate the slides for 15 minutes at room temperature in dark. **Note:** Incubation time can be optimized.
- 7. Rinse slides in 3 changes of distilled water.
- 8. Counterstain with Modified Mayer's Hematoxylin Solution for 1 minute at room temperature.
- 9. Wash tissue using tap water for 5 minutes.

Tissue preparation (Rehydration and mounting):

- 1. Wash slides with 70% Ethanol once for 1 minute.
- 2. Wash slides with 95% Ethanol twice for 1 minute each.
- 3. Wash slides with 95% Ethanol twice for 1 minute each.
- 4. Wash slides with 100% Ethanol twice for 3 minutes each.
- 5. Wash slides with Xylene twice for 5 minutes each.
- Clear tissue sample and mount in xylene-based mounting medium.

EXAMPLE DATA ANALYSIS AND FIGURES

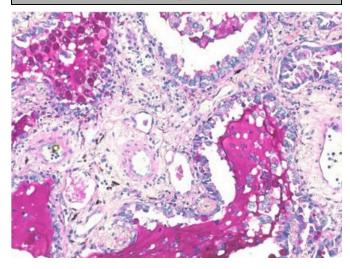


Figure 1. Staining of Lung adenocarcinoma tissue sample using Stayright™ Periodic Acid Schiff (PAS) Stain Kit (Mucin Stain).

DISCLAIMER

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