

PERIODIC ACID SCHIFF REACTION (PAS) (Microwave)

PURPOSE:	For In Vitro Diagnostic Use: Intended for the qualitative demonstration of glycogen, mucin and fungi.
PRINCIPLE:	Periodic Acid oxidizes glycols to aldehydes. Schiff Reagent then binds to these aldehydes and the sulphur is removed from the Schiff's by washing with water, revealing the fuchsia color.
CONTROL:	Tissue known positive for fungus, normal liver <i>Control Slides can be purchased from Histology Control Systems. See inside back cover, Item# cs005.</i>
SPECIMEN PREPARATION:	Any fixed, paraffin embedded sections cut at 5 micrometers
SOLUTIONS:	1. Periodic Acid 0.5% Aqueous Item# s1860 2. Schiff Reagent Item# s272 3. Harris Hematoxylin Item# s212 4. Bluing Solution Item# s127 <i>Solutions can be purchased separately from Poly Scientific.</i>
NOTES:	<i>Variations in timing may occur due to the power wattage of the microwave oven. Provided times and power levels are based on 1000 watt microwave oven.</i>
REFERENCE:	Lillie, R. D. <u>Histopathologic Technic and Practical Histochemistry</u> . 3rd Ed. McGraw-Hill Book Co. New York. 1965. p. 198.

STAINING PROCEDURE:

1. Deparaffinize and hydrate to distilled water.
2. Treat in Periodic Acid 0.5% Aqueous for 5 minutes (do not microwave).
3. Rinse well.
4. Place 50 mL of Schiff Reagent in a plastic coplin jar (loosely apply cap) and microwave for 20 seconds. Stir and re-microwave for 15–20 seconds or until solution is hot. Stir again and place slides in hot solution for 1 1/2 minutes. Check control. If additional time is needed place slides back in hot solution until desired intensity is reached.
5. Rinse well in water for 5 minutes.
6. Place 50 mL of Harris Hematoxylin in a plastic coplin jar and microwave for 20–30 seconds. Stir and place slides in hot solution for 1 minute.
7. Place in Bluing Solution for 2 dips and rinse in water.
8. Dehydrate, clear and mount with Poly Mount (Item# s2153) or any other acceptable mounting medium.

RESULTS:

Glycogen, Mucin, Basement Membranes, Reticulum and Fungi Rose Red
 Nuclei..... Blue

Poly Scientific R&D Corp.

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