

PERIODIC ACID SCHIFF REACTION (PAS)

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 sulphur is removed from the Schiff Reagent by washing, thereby revealing the fuchsia color.
CONTROL:	Tissue known positive for fungus, liver <i>Control Slides can be purchased from Histology Control Systems. See inside back cover, Item# cs004 and Item# cs021.</i>
SPECIMEN PREPARATION:	10% Buffered Formalin, paraffin embedded sections cut at 6 micrometers
SOLUTIONS:	1. Schiff Reagent Item# s272 2. Periodic Acid 0.5% Aqueous Item# s1860 3. Acid Alcohol 0.5% Item# s103B 4. Harris Hematoxylin Item# s212 5. Bluing Solution 1% Lithium Carbonate Item# s127 <i>Solutions can be purchased separately from Poly Scientific.</i>
NOTES:	
REFERENCE:	Bancroft, J. D. & Stevens, A. <u>Theory and Practice of Histological Techniques</u> . 4th Ed. Churchill Livingstone. New York. 1996. p 185.

STAINING PROCEDURE:

1. Deparaffinize and hydrate slides to distilled water.
2. Periodic Acid 0.5% Aqueous for 5 minutes.
3. Rinse in 4 changes of distilled water.
4. Schiff Reagent for 15 minutes.
5. Wash well in water for 10 minutes.
6. Harris Hematoxylin for 5 minutes.
7. Wash well in water.
8. Quick dip in Acid Alcohol 0.5%.
9. Wash well in water.
10. Bluing Solution 1% Lithium Carbonate, 2 dips.
11. Wash 5 minutes in water.
12. Dehydrate in 95% Alcohol, Absolute Alcohol and clear in Xylene, 2 changes each.
13. Mount with Poly Mount (Item# s2153) or any other acceptable mounting medium.

RESULTS:

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

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