

PATHOLOGY CORE

Special Stain Protocol: PAS

Purpose:

The purpose is to detect polysaccharides, neural mucosubstances, and basement membranes by oxidation of tissue elements to aldehydes by periodic acid.

Principle:

The nuclei will stain blue, PAS positive material will stain magenta/pink.

Positive Control Tissue:

Liver tissue

Tissue Fixative:

10% Formalin fixed tissue

Reagents Required:

Periodic Acid .05%

- Vendor
- Catalog number

Schiff's Solution

- Vendor- Harleco
- Lot number- 8155

Hematoxylin

Solution Preparation:

.05% Periodic Acid: 2.5 gram of periodic acid with 200ml of DI water
(Preferably freshly prepared)

Protocol:

1. Deparaffinize slides (xylene→distilled water)
2. Immerse slides in .05% periodic acid for 15 minutes
3. Wash slides with DI water
4. Immerse slides in Schiff's solution for 25 minutes
5. Wash slides with cold tap water for 10 minutes
6. Immerse slides in hematoxylin for 20 seconds
7. Wash slides with DI water
8. Immerse slides in acid alcohol (3 dips)
9. Wash slides in cold tap water for 10 minutes
10. Dehydrate slides and coverslip



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Interpretation:

PAS positive material=Magenta/Pink

Background/Nuclei=blue

References:

Theory and Practice of Histotechnology

Notes:

- Separate solutions should not be stored for more than 1 week.
- It is essential that a positive control is used with all test sections



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