

LILLIE'S ALLOCHROME METHOD
FOR BASEMENT MEMBRANE & RETICULUM FIBERS

PURPOSE:	For In Vitro Diagnostic Use: Intended for the qualitative demonstration of arteriosclerotic lesions, reticulum fibers and basement membranes.
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. Weigerts selectively stains the nuclei and Picric Acid Methyl Blue stains muscle and collagen differentially by dye size and competition.
CONTROL:	Kidney <i>Control Slides can be purchased from Histology Control Systems. See inside back cover, Item# cs032.</i>
SPECIMEN PREPARATION:	Formalin fixed, paraffin embedded sections cut at 6 micrometers
SOLUTIONS:	1. Schiff Reagent Item# s272 2. Periodic Acid 0.5% Aqueous Item# s1860 3. Weigert's Iron Hematoxylin Sol Set (A & B) Item# s216B <u>Working Solution:</u> Mix equal parts of solutions A & B for use. 4. Picric Acid Methyl Blue Item# s256D 5. Sodium Meta-Bisulfite 0.5% Aqueous Item# s277A <i>Solutions can be purchased separately from Poly Scientific.</i>
NOTES:	Valuable for the distinction between basement membranes and reticulum fibers and the demonstration of arteriosclerotic lesions.
REFERENCE:	Luna, Lee G. <u>Histopathologic Methods and Color Atlas of Special Stains and Tissue Artifacts</u> . American Histolabs Inc. Gaithersburg, MD. 1992. pp. 404-405.

STAINING PROCEDURE:

1. Deparaffinize and hydrate to distilled water.
2. Place in Periodic Acid 0.5% Aqueous for 5 minutes.
3. Wash in tap water for 5 minutes.
4. Place in Schiff Reagent for 15 minutes.
5. Place in Sodium Meta-Bisulfite 0.5% Aqueous for 2 changes, 2 minutes each.
6. Wash in tap water for 10 minutes.
7. Place in Weigert's Iron Hematoxylin Solution for 5 minutes.
8. Wash in tap water for 10 minutes.
9. Place in Picric Acid Methyl Blue for 6 minutes.
10. Dehydrate quickly in 95% Alcohol, Absolute Alcohol and clear in Xylene, 2 changes each.
11. Mount with Poly Mount (Item# s2153) or any other acceptable mounting medium.

RESULTS:

- Nuclei..... Black, Gray or Brown
- Cytoplasm and Muscle Cells..... Gray, Green to Greenish-Yellow
- Reticulum and Collagen Blue
- Basement Membrane Red

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