

SWEAT-PUCHTLER METHOD FOR BASEMENT MEMBRANES

PURPOSE:	For In Vitro Diagnostic Use: Intended for the qualitative demonstration of basement membranes.
PRINCIPLE:	Periodic Acid oxidizes the basement membranes exposing sites for the iron resorcin fuchsin lake to bind to. The stain is self differentiating due to the high acidity and alcoholic content.
CONTROL:	Kidney <i>Control Slides can be purchased from Histology Control Systems. See inside back cover, Item# cs005.</i>
SPECIMEN PREPARATION:	Carnoy's Fluid fixed, paraffin embedded sections cut at 6 micrometers
SOLUTIONS:	1. Carnoy Fluid Fixative Item# s163 2. Periodic Acid 0.5% Aqueous Item# s1860 3. Sodium Bisulfite Solution Item# s275D 4. Resorcin Fuchsin Working Solution Item# s265 5. Nuclear Fast Red Kernechtrot 0.1% Item# s248 <i>Solutions can be purchased separately from Poly Scientific.</i>
NOTES:	
REFERENCE:	Luna, Lee G. <u>Histopathologic Methods and Color Atlas of Special Stains and Tissue Artifacts</u> . American Histolabs Inc. Gaithersburg, MD. 1992. pp. 399-400.

STAINING PROCEDURE:

1. Deparaffinize and hydrate to distilled water.
2. Periodic Acid 0.5% Aqueous for 5 minutes.
3. Rinse in distilled water, 2 changes.
4. Sodium Bisulfite Solution for 15 hours.
5. Rinse in distilled water, 5-6 changes.
6. Resorcin Fuchsin Working Solution for 4 hours.
7. Rinse in distilled water, 3 changes.
8. Counterstain in Nuclear Fast Red Kernechtrot 0.1% for 2 minutes.
9. Rinse in distilled water, 3 changes.
10. Dehydrate 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:

Basement Membranes Black in cross sections, Gray in tangential sections
Nuclei..... Pink to Red

Poly Scientific R&D Corp.

Revision: B-18

PAGE 47

