WEIGERT'S METHOD FOR ELASTIC FIBERS

| PURPOSE: | For In Vitro Diagnostic Use: Intended for the qualitative demonstration of elastic fibers. |
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| PRINCIPLE: | An Iron Hematoxylin is used here since it will resist removal by the acidic stain that follows. The Iron Resorcin Fuchsin lake binds to elastic fibers selectively. The stain is self-differentiating due to the high acidity and alcoholic content. The counterstain binds selectively by dye competition, size and charge. |
| CONTROL: | Artery, aorta Control Slides can be purchased from Histology Control Systems. See inside back cover, Item# cs011. |
| SPECIMEN PREPARATION: | Any well-fixed tissue, paraffin embedded sections cut at 6 micrometers |
| SOLUTIONS: | 1. Weigert's Iron Hematoxylin Solution Set (A & B) Item# s216B Working Solution: Mix equal parts of solutions A & B for use. 2. Resorcin Fuchsin Working Solution Item# s265 3. Van Gieson's Solution Item# s289 Solutions can be purchased separately from Poly Scientific. |
| NOTES: | |
| REFERENCE: | Bancroft, J. D. & Stevens, A. <u>Theory and Practice of Histological Techniques</u> . 4th Ed. Churchill Livingston. New York. 1996. pp 194-195. |

STAINING PROCEDURE:

- 1 Deparaffinize and hydrate to distilled water.
- Weigert's Iron Hematoxylin Solution for 10 minutes. 2.
- Wash well in distilled water. A long wash intensifies the stain.
- Place slides in Resorcin Fuchsin Working Solution for 30-45 minutes or longer.
- Rinse in 95% Alcohol.
- Wash in tap water.
- Van Gieson's Solution for 1 minute. Save solution. If overstained, water will remove excess Van Gieson's Solution.
- Dehydrate in 95% Alcohol, Absolute Alcohol and clear in Xylene, 2 changes each.
- Mount with Poly Mount (Item# s2153) or any other acceptable mounting medium.

RESULTS:

| Elastic Fibers | Blue Black to Black |
|----------------|---------------------|
| Nuclei | Blue to Black |
| Collagen | Pink to Red |
| Other Elements | Yellow |

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