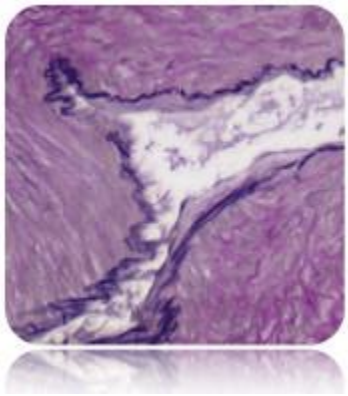
Elastic Stain Kit
(Modified Verhoff's)

Description: The Elastic Stain Kit is intended for use in histological demonstration of elastin in tissue sections. Demonstration of elastic tissue is useful in cases of emphysema (atrophy of elastic tissue), arteriosclerosis (thinning and loss of elastic fibers) and various other vascular diseases.

Elastic fibers:	Black to Blue/Black
Nuclei:	Blue to Black
Collagen:	Red
Muscle & Other:	Yellow



Uses/Limitations:
Not to be taken internally.
For In-Vitro Diagnostic use only.
Histological applications.
Do not use if reagents become cloudy.
Do not use past expiration date.
Use caution when handling reagents.
Non-Sterile.

Control Tissue: Lung or any vascular tissue.

Availability/Contents:

Kit Contents	Volume	Storage
Hematoxylin Solution (5%)	250ml	18-25℃
Ferric Chloride (10%, Aqueous)	125 ml	18-25℃
Lugol's Iodine Solution	125 ml	18-25℃
Ferric Chloride (2%) Differentiating Solution	125 ml	18-25℃
Sodium Thiosulfate Solution (5%)	125 ml	18-25℃
Van Gieson's Solution	125 ml	18-25℃

Precautions:
Keep away from open flame.
Avoid contact with skin and eyes.
Harmful if swallowed.
Follow all Federal, State, and local regulations regarding disposal.
Use in chemical fume hood whenever possible.
Wear protective clothing.

Storage: 18° C 25° C

Revision Date: 03/30/2016

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Preparation of Reagents Prior to Beginning:

1. Prepare working Elastic Stain Solution by mixing: 30ml Hematoxylin Solution (5%)
   12ml Ferric Chloride Solution (10%)
   12ml Lugol's Iodine Solution.
   Mixed solution may be used for 24 hours.
2. **Note:** Lugol's Iodine Solution will cause staining of all kit vials and labels over time. This does not adversely affect the performance of this product and is merely cosmetic in nature.
3. **Note:** Removal of mercury deposits is not required for tissues that have been fixed in mercury containing fixatives since it will be removed by the staining solution.

Procedure (Standard):

1. Deparaffinize sections if necessary and hydrate to distilled water.
2. Stain tissue section with working Elastic Stain Solution for 15 minutes.
3. Rinse in running tap water until no excess stain remains on slide.
4. Dip slides in Ferric Chloride (2%) Differentiating Solution 15-20 times and rinse in tap water.
5. Check slides microscopically for proper differentiation. Repeat step 4 if required.
6. Rinse in running tap water.
7. Place slides in Sodium Thiosulfate Solution (5%) for 1 minute.
8. Rinse in tap water for 2 minutes followed by 2 changes in distilled water.
9. Stain slide using Van Gieson's Solution for 2 minutes.
10. Rinse in two changes of 95% alcohol.
11. Dehydrate in absolute alcohol.
12. Clear, and mount in synthetic resin.

References:

1. Vass, D.G., et al. The value of an elastic tissue stain in detecting venous invasion in colorectal cancer. Journal of Clinical Pathology, July; 57(7); pages 769-772, 2004.
2. Prophet, E.B., et al. A.F.I.P. Laboratory Methods in Histotechnology. Page 134, 1994.
3. Carson, F.L., Histotechnology: A Self Instructional Text, ASCP Press, Chicago, IL. Pages 138-139, 1990.
4. O'Connor, W.N., Valle, S., A Combination Verhoff's Elastic and Masson's Trichrome Stain for Routine Histology. Stain Technology, 1982 July; 57(4): pages 207-210.
5. Sheenan, D.C., Hrapchak, B.B. Theory and Practice of Histotechnology, 2nd Edition. CV Mosby, St. Louis, MO. Pages 196-197, 1980.
6. Mallory, F.B. Pathological Technique, 3rd Edition. Hafner Publishers, New York. Page 169, 1968.

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