



Instructions For Use ETS-2-IFU

Rev. Date: July 17, 2011

Revision: 1

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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 past expiration date.
Use caution when handling reagents.
Non-Sterile.

Control Tissue: Lung or any vascular tissue.

Availability/Contents:

<u>Item #</u>	<u>Kit Contents</u>	<u>Volume</u>	<u>Storage</u>
HSV060	Hematoxylin Solution (5%)	60ml	18-25°C
FCC030	Ferric Chloride (10%, Aqueous)	30 ml	18-25°C
LIS030	Lugol's Iodine Solution	30 ml	18-25°C
FCB060	Ferric Chloride (2%) Differentiating Solution	60 ml	18-25°C
STB030	Sodium Thiosulfate Solution (5%)	30 ml	18-25°C
VGS030	Van Gieson's Solution	30 ml	18-25°C
N/A	Graduated Mixing Vial		

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.

Preparation of Reagents Prior to Beginning:

1. Prepare working Elastic Stain Solution in Mixing Vial by combining 5 drops of Hematoxylin Solution (5%) with 2 drops of Ferric Chloride Solution (10%) and 2 drops of Lugol's Iodine Solution. Agitate vial until reagents are completely mixed.
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.

Storage: 18° C



25° C



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Procedure (All steps at room temperature):

1. Deparaffinize sections if necessary and hydrate to distilled water.
2. Pour “working” Elastic Stain Solution over tissue section and incubate for 15 minutes.
3. Rinse in running tap water until no excess stain remains on slide.
4. Apply continuous drops of Ferric Chloride (2%) Differentiating Solution 10-15 drops.
5. Rinse once in tap water followed by 2 dips in DI/Distilled water.
6. Check slides microscopically for proper differentiation. Repeat step 4 if required.
7. Apply 4-5 drops of Sodium Thiosulfate Solution (5%) to tissue section and incubate for 1 minute.
8. Rinse once in tap water followed by 2 dips in DI/Distilled water.
9. Apply 4-5 drops of Van Gieson’s Solution to tissue section and incubate for 2-5 minutes.
10. Rinse in two changes of 95% alcohol.
11. Dehydrate in absolute alcohol.
12. Clear, and mount in synthetic resin.

References:

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3. Carson, F.L., *Histotechnology: A Self Instructional Text*, ASCP Press, Chicago, IL. Pages 138-139, 1990.
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