REAGENT ASSEMBLY KIT
ITEM# k055

TYSON'S MODIFICATION FOR ELASTIC FIBERS

PURPOSE:	For In Vitro Diagnostic Use: Intended for the qualitative demonstration of elastic fibers.
PRINCIPLE:	The tissue is overstained with a soluble lake of Hematoxylin-Ferric Chloride-Iodine. Both Ferric Chloride and Iodine serve as mordants but they also have an oxidizing function that assists in converting Hematoxylin to hematein. The mechanism of dye binding is by formation of hydrogen bonds. Differentiation is accomplished by using excess mordant, or Ferric Chloride to break the tissue-mordant-dye complex. Sodium Thiosulfate is used to remove excess Iodine. Van Gieson's solution is the most commonly used counterstain.
CONTROL:	Artery *Control Slides can be purchased from Histology Control Systems. See inside back cover, Item# cs011.*
SPECIMEN PREPARATION:	Formalin fixed, paraffin embedded sections cut at 6 micrometers
SOLUTIONS:	1. Hematoxylin 5% Alcoholic Item# s212B 2. Ferric Chloride 10% Aqueous Item# s180B 3. Lugol's Iodine Working Solution Item# s234A Working Solution: Mix the above just before use and filter. Hematoxylin..... 25 mL Ferric Chloride ..... 15 mL Lugol's Iodine ..... 10 mL 4. Van Gieson's Solution Item# s289 *Solutions can be purchased separately from Poly Scientific.*
NOTES:	
REFERENCE:	Tyson, Hal. Personal interview. Downstate Medical Center.1976.

STAINING PROCEDURE:

1. Deparaffinize and hydrate to water.
2. Elastic Tissue Working Solution for 15–20 minutes.
   (Prepare fresh each time from stock solutions).
3. Wash well in water. Check under microscope. Elastic should be black. If not, return to Elastic stain for 5-10 minutes.
4. Counterstain with Van Gieson's Solution for 1-3 minutes.
5. Go directly to 95% Alcohol for 3 quick dips.
6. Absolute Alcohol, 2 changes.
7. Xylene, 2 changes.
8. Mount with Poly Mount (Item# s2153) or any other acceptable mounting medium.

RESULTS:

Elastic Fiber ..... Blue-Black to Black

Collagen ..... Pink to Red

Nuclei ..... Brown to Black

Other Tissue Elements ..... Yellow

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Revision: B-18

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