

**SWEAT-PUCHTLER METHOD FOR AMYLOID (SIRIUS RED)**

<b>PURPOSE:</b>	For In Vitro Diagnostic Use: Intended for the qualitative demonstration of amyloid.
<b>PRINCIPLE:</b>	Sirius Red has a highly selective affinity for amyloid. This is due to the beta-pleated arrangement of the amyloid and the planar shape of the Sirius Red molecule. The Sirius Red inserts itself in-between the pleats of the amyloid and is held by hydrogen bonding.
<b>CONTROL:</b>	Any tissue known to contain amyloid <i>Control Slides can be purchased from Histology Control Systems. See inside back cover, Item# cs001.</i>
<b>SPECIMEN PREPARATION:</b>	Formalin fixed, paraffin embedded sections cut at 6 micrometers
<b>SOLUTIONS:</b>	1. Alkaline Alcohol for Sweat-Puchtler Item# s2088 2. Sirius Red 1% Aqueous Item# s274 3. Borate Buffer 0.1M pH 9.0 Item# s127D 4. Mayer's Modified Hematoxylin Item# s216  <i>Solutions can be purchased separately from Poly Scientific.</i>
<b>NOTES:</b>	
<b>REFERENCE:</b>	Luna, Lee G. <u>Histopathologic Methods and Color Atlas of Special Stains and Tissue Artifacts</u> . American Histolabs Inc. Gaithersburg, MD. 1992. pp. 368-369.

**STAINING PROCEDURE:**

1. Deparaffinize and hydrate to distilled water.
2. Mordant in Buffered Neutral Formalin overnight.
3. Wash in water for 15 minutes.
4. Alkaline Alcohol for Sweat-Puchtler for 1 hour.
5. Rinse in distilled water for 10 seconds.
6. Place slides in preheated Sirius Red 1% Aqueous in a 60°C oven for 90 minutes.
7. Rinse briefly in Borate Buffer 0.1M pH 9.0 for 2 changes.
8. Wash in running water for 5 minutes.
9. Mayer's Modified Hematoxylin for 5 minutes.
10. Wash in running water for 5 minutes and then drain slides.
11. Dehydrate rapidly in Absolute Alcohol and then clear in Xylene, 3 changes each.
12. Mount with Poly Mount (Item# s2153) or any other acceptable mounting medium.

**RESULTS:**

Amyloid ..... Pink to Red  
 Nuclei ..... Blue  
 Background ..... Unstained  
 Elastica ..... Pink to Red

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