

SOUTHGATE'S MUCICARMINE METHOD (Microwave)

PURPOSE:	For In Vitro Diagnostic Use: Intended for the qualitative demonstration of mucin.
PRINCIPLE:	Aluminum is believed to form a chelation complex with the carmine, changing the molecule to a positive charge allowing it to bind with acid substrates of low density such as mucins.
CONTROL:	Normal small intestine <i>Control Slides can be purchased from Histology Control Systems. See inside back cover, Item# cs006.</i>
SPECIMEN PREPARATION:	Formalin fixed, paraffin embedded sections cut at 5 micrometers
SOLUTIONS:	1. Southgate's Mucicarmine Stock Solution Item# s2161 2. Weigert's Iron Hematoxylin Solution Set (A & B) Item# s216B <u>Working Solution:</u> Mix equal parts of solutions A & B for use. 3. Metanil Yellow 0.25% Aqueous Item# s239 <i>Solutions can be purchased separately from Poly Scientific.</i>
NOTES:	<i>Variations in timing may occur due to the power wattage of the microwave oven. Provided times and power levels are based on 1000 watt microwave oven.</i>
REFERENCE:	Luna, Lee G. <u>Histopathologic Methods and Color Atlas of Special Stains and Tissue Artifacts</u> . American Histolabs Inc. Gaithersburg, MD. 1992.

STAINING PROCEDURE:

1. Deparaffinize and hydrate slides to distilled water.
2. Place 50 mL of Weigert's Iron Hematoxylin Working Solution in a plastic coplin jar (loosely apply cap) and microwave for 20 seconds. Stir and re-microwave for 15 seconds. Stir again and add slides to hot solution for 4-6 minutes.
3. Rinse well in running water.
4. Place 50 mL of Southgate's Mucicarmine Working Solution (10 mL Southgate's Mucicarmine Stock Solution to 90 mL distilled water) in a plastic coplin jar (loosely apply cap) and microwave for 15 seconds. Stir and re-microwave for 20 seconds. Stir again and add slides to hot solution for 8-10 minutes. If additional time is needed place slides back in hot solution until desired intensity is reached.
5. Rinse quickly in distilled water.
6. Counterstain in Metanil Yellow 0.25% Aqueous for 1-2 minutes or until desired intensity is reached.
7. Rinse well in distilled water.
8. Dehydrate, clear and mount with Poly Mount (Item# s2153) or any other acceptable mounting medium.

RESULTS:

Mucin..... Bright Rose
Nuclei..... Black
Connective Tissue Yellow

Poly Scientific R&D Corp.

Revision: B-18

