

MAY GRUNWALD GIEMSA METHOD FOR NUCLEAR ELEMENTS (Microwave)

PURPOSE:	For In Vitro Diagnostic Use: Intended for the qualitative demonstration of cells in hematopoietic tissue.
PRINCIPLE:	The Giemsa and Jenner Stains are a combination of acid and neutral dyes. Differential staining is attributed to relative charge of cells, dye size and the pH of the solutions.
CONTROL:	Normal bone marrow <i>Control Slides can be purchased from Histology Control Systems. See inside back cover, Item# cs020.</i>
SPECIMEN PREPARATION:	Zinc Formalin fixed, paraffin embedded sections cut at 4-6 micrometers
SOLUTIONS:	1. Jenner Stain Working Solution Item# s225 2. Giemsa Stain Stock Solution Item# s195 <u>Giemsa Working Solution:</u> Prepare fresh. Do not reuse. Giemsa Stock..... 50 drops Distilled Water 40 mL <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:	Clark, George. <u>Staining Procedures</u> . 4th Ed. Williams & Wilkins. Baltimore, MD. 1981. p. 179.

STAINING PROCEDURE:

1. Deparaffinize and hydrate to water.
2. If Zenker fixed, place in Gram's or Lugol's Iodine Solution for 15 minutes. Rinse in tap water. Place in Sodium Thiosulfate 5% Aqueous for 3 minutes.
3. Wash well in running water.
4. Place slides in Methyl Alcohol, 2 changes for 3 minutes each.
5. Using a plastic coplin jar place slides in 40 mL of Jenner Stain Working Solution. Microwave for 20 seconds on power level 5.
6. Using a coplin jar place slides in 40 mL of Giemsa Working Solution. Microwave for 1 minute on power level 5.
7. Dehydrate rapidly in 95% Alcohol, Absolute Alcohol and clear in Xylene.
8. Mount with Poly Mount (Item# s2153) or any other acceptable mounting medium.

RESULTS:

Nuclei.....Blue
Cytoplasm.....Pink to Rose
Bacteria.....Blue

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