

KOSSA'S METHOD FOR CALCIUM

PURPOSE:	For In Vitro Diagnostic Use: Intended for the qualitative demonstration of calcium in tissue.
PRINCIPLE:	The Silver Solution binds to the calcium in the tissue and a strong light source is used to reduce the Silver to the visible form. Excess is removed with Sodium Thiosulfate.
CONTROL:	Undecalcified bone <i>Control Slides can be purchased from Histology Control Systems. See inside back cover, Item# cs010.</i>
SPECIMEN PREPARATION:	Formalin fixed, paraffin embedded sections cut at 5 micrometers
SOLUTIONS:	1. Silver Nitrate 5% Aqueous Item# s1890 2. Sodium Thiosulfate 5% Aqueous Item# s1895 3. Eosin Y 1% Alcoholic Item# s177 <i>Solutions can be purchased separately from Poly Scientific.</i>
NOTES:	Although the use of ultraviolet lamp and 100 watt bulb for developing the Silver is suggested, we strongly recommend direct sunlight to be used whenever possible.
REFERENCE:	Luna, Lee G . <u>Manual of Histologic Staining Methods of the Armed Forces Institute of Pathology</u> . 3rd Ed. McGraw-Hill Book Co. New York. 1968. pp. 176-177.

STAINING PROCEDURE:

1. Deparaffinize and hydrate to distilled water.
2. Place in Silver Nitrate 5% Aqueous for 15-30 minutes, exposed to direct sunlight, ultraviolet lamp, or a 100 watt desk lamp light.
3. Rinse in distilled water.
4. Place in Sodium Thiosulfate 5% Aqueous for 2 minutes.
5. Rinse well in distilled water.
6. Counterstain in Eosin Y 1% Alcoholic for 1 minute.
7. Rinse in distilled water.
8. Dehydrate in 95% Alcohol, Absolute Alcohol and clear in Xylene, 2 changes each.
9. Mount with Poly Mount (Item# s2153) or any other acceptable mounting medium.

RESULTS:

Calcium SaltsBlack
BackgroundPink to Rose

Poly Scientific R&D Corp.

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