CANCER DIAGNOSTICS, INC.

Instructions For Use

SS1027-VO-IFU

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Calcium Stain Kit

(Modified Von Kossa)

Description and Principle

The Calcium Stain Kit (Modified Von Kossa) is intended for use in the histological visualization of calcium deposits in paraffin sections.
Calcium salts are impregnated by silver by reaction with carbonate and phosphate ions. Silver is reduced to visible metallic form by intense light. Reagent volumes provided can be used to perform an estimated 300 - 400 tests.

Expected Results

Calcium in mass deposits:	Black
Calcium in dispersed deposits:	Gray
Nuclei:	Red
Cytoplasm:	Light Pink

Kit Contents

	Storage
1. Silver Nitrate Solution (5%)	2-8°C
2. Sodium Thiosulfate Solution (5%)	18-25°C
3. Nuclear Fast Red Solution	18-25°C.

Suggested Controls *(not provided)*

Any fixed tissue that contains calcium deposits.

Uses/Limitations

For In-Vitro Diagnostic use only.
Do not use if reagents become cloudy or precipitate
Do not use past expiration date.
Use caution when handling reagents.
Non-Sterile
Intended for FFPE sections cut at 5-10µm.
This procedure has not been optimized for frozen sections.
Frozen sections may require protocol modification.

Storage

Mixed storage conditions. Store according to individual label instructions.

Safety and Precautions

Please see current Safety Data Sheets (SDS) for this product and components GHS classification, pictograms, and full hazard/precautionary statements.

Important Notes

1. All glassware used in this procedure should be chemically cleaned and rinsed thoroughly in distilled water.

2. Do not use metal forceps to remove slides from reagents. Use plastic forceps only,

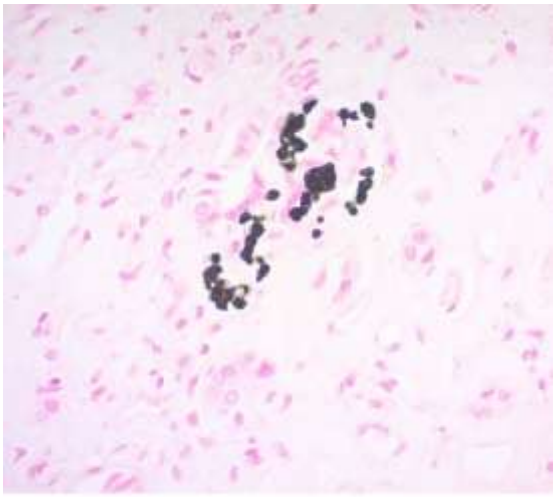
3. Equilibrate all reagents to room temperature prior to use.

Procedure

1. Deparaffinize sections if necessary and hydrate to distilled water.

2. Incubate slide in Silver Nitrate Solution (5%) for 30-60 minutes while exposing to either ultraviolet light or incandescent light at 75 watts or greater. For best results, keep light source within 2 feet (61cm) of slide during Silver Nitrate staining procedure.

3. Rinse in 3 changes of distilled water.



Human tissue containing calcium deposits demonstrated by Calcium Stain (modified Von Kossa)

4. Incubate slide in Sodium Thiosulfate Solution (5%) for 2 minutes.

5. Rinse for 2 minutes in running tap water followed by distilled water.

6. Stain tissue section with Nuclear Fast Red Solution for 5 minutes.

7. Rinse in 2 changes of distilled water.

8. Dehydrate very quickly in 3 changes of Absolute Alcohol.

9. Clear, and mount in synthetic resin.

References

1. Sheenan, D.C., Hrapchak, B.B. Theory and Practice of Histotechnology, 2nd Edition. Battelle Press, Columbus, OH.
2. Clark, G., et al. Staining Procedures, 4th Edition, Williams & Wilkins Press, Baltimore, MD.
3. Symonds, D.A., Use of the Von Kossa stain in identifying occult calcifications in breast biopsies. American Journal of Clinical Pathology, 1990, July; 94(1) pages 44-48.