

Usage procedure for:

## Calcium Stain Kit (Modified Von Kossa)

Avantik Kit Item #: RS4550-125 | RS4550-250 | RS4550-500



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### Solutions Provided in Stain Kit:

Silver Nitrate, 5%  
Sodium Thiosulfate, 5%  
Nuclear Fast Red

### Conventional Procedure

1. Deparaffinize and hydrate sections through alcohol to distilled water.
2. Place slides in **Silver Nitrate, 5%** for **10-60 minutes** with exposure to light. The source of light can be bright sunlight, bright incandescent lamp or UV light.  
Check the slides periodically. Remove slides from the Silver Nitrate when the calcium salts are brown-black.
3. Rinse slides well in distilled water.
4. Place slides in **Sodium Thiosulfate, 5%** for **2-3 minutes**.
5. Rinse slides well in distilled water.
6. Counterstain slides in **Nuclear Fast Red** for **5 minutes**.
7. Wash slides in running tap water for 1-2 minutes.
8. Dehydrate slides in 2 changes each of 95% alcohol and 100% alcohol.
9. Clear in 2-3 changes of xylene and mount with appropriate mounting medium.

### Results:

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

### Kit Components and Related Control Slides:

Avantik Item Numbers:

**Silver Nitrate, 5%:** RS4449-250 (250mL) | RS4449-500 (500mL)

**Sodium Thiosulfate, 5%:** RS4455-250 (250mL) | RS4455-500 (500mL)

**Nuclear Fast Red:** RS4429-250 (250mL) | RS4429-500 (500mL)

**Calcium Control Slides:** SL6203-A (Pack/12) | SL6203-B (Pack/25) | SL6203-D (Pack/100)