



VitroView™ Warthin-Starry (Microorganism Stain) kit

SKU#: VB-2007

Description: The Warthin–Starry (WS) Microorganism Stain employs a silver nitrate-based staining technique widely applied in histology. Specifically designed for visualizing Spirochetes, Helicobacter pylori, Legionella pneumophila, and bacteria associated with Cat Scratch Fever, this kit is suitable for use on formalin-fixed, paraffin-embedded, or frozen sections.

Kit Contents:

SKU#	Item Name	Quantity
VB-2007-1	Glycine-Acetic Acid solution	125 ml
VB-2007-2	Silver Nitrate Solution (0.25%)	125ml
VB-2007-3	Silver Nitrate Solution (2%)	30 ml
VB-2007-4	Gelatin Solution	150 ml
VB-2007-5	Hydroquinone Solution	60 ml
VB-2007-6	Tartarazine Solution	125 ml

Storage

2-8°C

Protocol

1. Deparaffinize in xylene I for 6 minutes and II for 6 minutes.
2. Rehydrate
 - a. Ethanol 100% (2 minutes)
 - b. Ethanol 100% (2 minutes)
 - c. Ethanol 95% (2 minutes)
 - d. Ethanol 95% (2 minutes)
 - e. Ethanol 70% (2 minutes)
3. Rinse in DI water (2 minutes).
4. Incubate slides in Glycine-acetic acid solution for 2 minutes.
5. Place slides in 40 ml of 0.25% silver nitrate in a plastic Coplin jar, with the cap loosely applied, and microwave at power level 6 (360W) for 40 seconds. Gently agitate the Coplin jar for about 15 seconds. Microwave again at power level 6 for 20 seconds. Gently agitate the Coplin jar again for about 15 seconds. Allow the slides to remain in the hot solution (75°-80°C) for 2 minutes.
6. Freshly prepared Silver Nitrate-Gelatin-Hydroquinone Developer:
 - Silver Nitrate Solution (2%)-----10.0 ml
 - Gelatin Solution -----25.0 ml
 - Hydroquinone Solution -----10.0 ml
7. Place in freshly prepared silver nitrate-gelatin-hydroquinone developer in a plastic Coplin jar, with the cap loosely applied. Place in a microwave oven and microwave at power

level 1 for one minute. Gently agitate the Coplin jar for about 15 seconds. Allow the slides to remain in the solution until the sections appear gray. This usually takes about 1 minute but may take longer.

8. Wash quickly and thoroughly in hot running water.
9. Rinse in two changes of distilled water.
10. Counterstain with tartrazine solution for 15 seconds.
11. Rinse in two changes of distilled water.
12. Dehydrate with 2 changes of 95% Ethanol and 2 changes of 100% Ethanol (2 minute per change).
13. Clear with 3 changes of xylene (5 minute per change).
14. Mount coverslip onto glass slide with Permount or some other suitable organic mounting medium

Expected Staining Results

- Alipia felis (cat-scratch bacillus)-----black
- Legionnaires bacteria-----black
- Klebsiella-----brown to black
- Helicobacter (pylori) -----black
- Nuclei -----brown-black
- Background----- yellow

Note: This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Precautions: Handle with care. Avoid contact with eyes, skin and clothing. Do not ingest. Wear gloves.