



VitroView™ Grocott-Gomori's Methenamine Silver Stain Kit

SKU#: VB-2003

Description

The mucopolysaccharide components of the fungal cell wall are oxidized to release aldehyde groups. The aldehyde groups then react with the silver nitrate, reducing it to a metallic silver, rendering them visible. This kit is designed to identify fungi on FFPE section or frozen sections.

Kit Contents

VB-2003-1	Chromic Acid Solution	100 ml
VB-2003-2	Sodium Bisulfite Solution	100 ml
VB-2003-3	0.2% Silver Solution	50 ml
VB-2003- 4	Methenamine/Borax Solution	50 ml
VB-2003-5	Gold Chloride Solution	100 ml
VB-2003-6	Sodium Thiosulfate Solution	100 ml
VB-2003-7	Light Green solution	100 ml

Storage

Store at 2-8°C: Silver solution, methenamine/borax solution and gold chloride solution.
 Store at room temperature: The other reagents

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. Place in 2% chromic acid, microwave with Hi power for 45 seconds and allows standing for 5 minutes. Or 60°C water bath for 1 hour.
5. Wash in tap water, rinse in distilled water.
6. 1% Sodium bisulfite, 1 minute, room temperature.
7. Wash in tap water, rinse in distilled 3 changes.
8. Fresh prepare methenamine silver working solution:
 - 1) 0.2% silver solution 25.0 ml
 - 2) Methenamine/Borax Solution 25.0 ml
 Mix just before use, discard
9. Place in methenamine silver working solution, microwave with Hi power for 70 seconds, tissue should be the color of a brown paper bag. Or 60°C water bath for 1 hour. Agitate the slides in the hot solution.

10. Rinse in distilled water, 2 changes.
11. Place in 0.5% Gold chloride for 1 minute or until gray.
12. Wash in distilled water.
13. Place in 5% % Sodium Thiosulfate for 3 minutes.
14. Wash in tap water, rinse in distilled.
15. Place in light green solution for 1 minute.
16. Rinse in distilled water.
17. Dehydrate with 2 changes of 95% Ethanol and 2 changes of 100% Ethanol (2 minute per change).
18. Clear with 3 changes of xylene (5 minute per change).
19. Mount coverslip onto glass slide with Permount or some other suitable organic mounting medium.

Result

- Fungi: black
- Background: green

Control Tissue: Fungus infected tissue section (provided)

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: Keep hot solutions in fume hood. Handle with care. Avoid contact with eyes, skin and clothing. Do not ingest. Wear gloves.