



VitroView™ ACID-FAST BACTERIA (AFB) STAIN Kit

SKU No. VB-2006

Introduction

The acid-fast organism's lipoid capsule demonstrates an affinity for carbol-fuchsin and withstands decolorization even after a dilute acid rinse. Mycobacteria's lipoid capsule possesses such a high molecular weight that it exhibits a waxy consistency at room temperature, impeding the successful penetration of aqueous-based staining solutions like Gram's stain. The VitroView™ ACID-FAST BACTERIA (AFB) STAIN Kit is specifically formulated for the demonstration of acid-fast bacteria within the 'Mycobacterium' genus, which encompasses the causative agent for tuberculosis.

Kit Components

- VB-2006-1 Carbol-Fuchsin Solution -----125 ml
- VB-2006-2 Acid Alcohol Solution -----250 ml ×2
- VB-2006-3 Methylene Blue Solution -----125ml

Storage

Room temperature.

Protocol

1. Slide Preparation:
 - a. For Paraffin Sections:Deparaffinize in Xylene I for 6 minutes and II for 6 minutes.Rehydrate: ethanol 100% (2 minutes)×2; ethanol 95% (2 minutes) ×2; ethanol 70% (2 minutes) ×1; Rinse in distilled water (5 minutes).
 - b. For Smears/Imprints: Air-dry the smear.
2. Carbol-fuchsin solution, microwave (80 power) for 45 seconds, allow slides to stand in hot solution for 5 minutes. Or Conventional Method: 60°C oven for 1 hour. Filter solution once a week
3. Wash in running tap water.
4. Acid alcohol until light pink and color stops running.
5. Wash in running tap water for 5 minutes..
6. Rinse in distilled water.
7. Working Methylene Blue Solution for 30 seconds.
8. Rinse in water.
9. Rapidly dehydrate in absolute alcohol.
10. Clear with 3 changes of xylene (5 minute per change).
11. Mount coverslip onto a glass slide with Permount or some other suitable organic mounting medium

Expect Results

- Acid-fast bacilli----- Bright red
- Cell Nuclei-----Blue

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