

## Product Information

### 05151 Fluorescent Stain Kit for Mycobacteria (Mycobacteria Fluorescent Stain Kit)

The Auramine Fluorochrome Kit is used to stain Acid Fast Bacilli (*Mycobacterium* sp.) in specimens and in culture. This fluorescent method, actually the best procedure, stains selectively mycobacteria by binding dye to the mycolic acid of the cell wall.

**Composition:**

Phenolic auramine Solution (Cat. No. 30503): Auramine O 0.3 g, Phenol 3.0 g, distilled water 100 ml

Acid Alcohol Solution (Cat. No. 56694): 75 % aqueous Ethanol 99.5 ml, Sodium chloride 0.5 g, Hydrochloric acid 0.5 ml

Potassium permanganate Solution (Cat. No. 81199): Potassium Permanganate 0.1 g, distilled water 100 ml

**Storage:**

Store at 4°C. Expiration date is stated on label.

**Directions:**

Thoroughly flame one side of a clean glass slide to be used for the smear. Let cool down before smearing.

Prepare a smear from the specimen on the flamed side of the slide and allow to air dry.

Fix the smear by passing the slide through a flame.

Flood the slide with Phenolic auramine Solution. Allow the stain to remain on surface of the slide for 15 minutes without drying.

Rinse with distilled water and shake off excess liquid.

Flood the slide with decolorizer (Acid Alcohol Solution) for 2-3 min. Slide will still appear pink.

Rinse thoroughly with distilled water and shake off excess.

Flood slide with counterstain (Potassium permanganate Solution) 3-4 min. Do not allow the slide to dry.

Rinse with distilled water and allow to air dry or blot dry.

Examine microscopically under a fluorescent microscope (UV light source) at low and high magnification. Slides can be screened on high power (400X) and verified under oil immersion lense.

Slides of Acid Fast Bacilli should be stained individually to prevent Acid Fast Bacilli carry-over from slide to another. This is a part of identification. Other methods may be required.

**Interpretation of results:**

Acid Fast Bacilli: luminous yellow rods in dark field.

*Escherichia coli*: green not fluorescence.

**References:**

1. S.M. Finegold, E.J. Baron, Bailey and Scott's Diagnostic Microbiology 7th ed. C.V. Mosby St. Louis (1986)
2. E.H. Lennette, A. Balows, W.J. Hausler Jr., H.J. Shadomy, Manual of Clinical Microbiology 4th ed. American Society for Microbiology, Washington, D.C. (1985)
3. A.L. Vestal, Procedures for the isolation and identification of mycobacteria. USDHEW, Public Health Service No. 1995, U.S. Government Printing. Washington, D.C. (1969)