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Fite's Stain Kit
(For Leprosy and Nocardia)

Description: The Fite's Stain Kit (For Leprosy and Nocardia) is intended for use in the histological visualization of mycobacterium Lepra bacillus and Nocardia. This kit may be used on formalin-fixed, paraffin-embedded or frozen sections.

Lepra bacillus:	Red
Nocardia:	Red
Background:	Blue

Uses/Limitations:
For In-Vitro Diagnostic use only.
Histological applications.
Do not use past expiration date.
Use caution when handling these reagents.

Control Tissue: Any well fixed paraffin embedded tissue.

Kit Contents:

Kit Contents	Volume	Storage
Xylene-Peanut Oil Solution	125 ml	Room Temperature
Carbol Fuchsin Solution	125 ml	Room Temperature
Acid Alcohol Solution (1%)	500 ml	Room Temperature
Methylene Blue Solution	125 ml	Room Temperature

Precautions:
Keep away from open flame.
Avoid contact with skin and eyes.
Harmful if swallowed.
Follow all Federal, State, and local regulations regarding disposal.
Use in chemical fume hood whenever possible.

Lepra bacillus Procedure (Standard):

1. Deparaffinize sections in 2 changes of Xylene-Peanut Oil Solution for 12 minutes each.
2. Air dry slide for 15 minutes. Do not remove oil film. Remaining film prevents de-staining of Lepra bacillus during differentiation.
3. Rinse slide in several changes of distilled water.
4. Incubate slide in Carbol Fuchsin Solution for 15 minutes.
5. Rinse slide in several changes of distilled water.
6. Differentiate section in Acid Alcohol Solution (1%) until background is pink.
7. Rinse slide in distilled water and check by microscope for correct differentiation.

Storage: 18° C  25° C

Store Components at Room Temperature.

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8. Rinse in running tap water for 1 minute followed by 1 rinse in distilled water.
9. Dip slide 2-3 times in Methylene Blue Solution.
10. Dip slide quickly in distilled water and check by microscope for correct staining.
11. Air dry slide at room temperature.
12. Dip slide several times in Xylene or Xylene Substitute.
13. Mount in synthetic resin.

Nocardia Procedure:

Preparation of Reagents Prior to Beginning:

1. Prepare **Diluted Acid Alcohol Solution** by mixing 25ml of Acid Alcohol Solution (1%) with 25ml of Distilled Water.

Procedure:

1. Deparaffinize sections in 2 changes of Xylene-Peanut Oil Solution for 12 minutes each.
2. Air dry slide for 15 minutes. Do not remove oil film. Remaining film prevents de-staining of Lepra bacillus during differentiation.
3. Rinse slide in several changes of distilled water.
4. Incubate slide in Carbol Fuchsin Solution for 15 minutes.
5. Rinse slide in several changes of distilled water.
6. Dip slide 2-3 times in Diluted Acid Alcohol Solution.
7. Rinse slide in distilled water and check by microscope for correct differentiation. Avoid decolorizing the Nocardia organism.
8. Rinse in running tap water for 1 minute followed by 1 rinse in distilled water.
9. Dip slide 2-3 times in Methylene Blue Solution.
10. Dip slide quickly in distilled water and check by microscope for correct staining.
11. Air dry slide at room temperature.
12. Dip slide several times in Xylene or Xylene Substitute.
13. Mount in synthetic resin.

References:

1. Mallory, Pathological Technique; page 275.
2. Crowder, C., Taylor, HW., Modified Fite Stain for Demonstration of Mycobacterium Species in Tissue Sections; Journal of Histotechnology; Volume 19; 2: pages 133-134.