

Intended use

Leishman Stain Kit is used in microscopy for staining of blood smears.

Summary

Leishman stain Kit is used in microscopy for staining blood smears. It provides excellent stain quality. It is generally used to differentiate and identify leucocytes, malaria parasites, and Trypanosoma. It is based on a methanolic mixture of "polychromed" methylene blue. (i.e., demethylated into various azures) and eosin. The methanolic stock solution is stable and also serves the purpose of directly fixing the smear and eliminating a prefixing step.

Principle

Leishman stain Kit contain methylene blue dye, a basic dye, which gives colour to an acidic component and eosin dye, an acidic dye, which gives colour to a basic component. These dyes differentiate the different components of blood. Leishman's Stain belongs to the group of Romanowsky stains. For the detection of malaria parasite Leishman staining seems more sensitive than e.g., Field's stain.

Reagents / Contents

Leishman Stain Kit

Leishman stain Kit	0.15 g
Methanol, absolute	100 mL
Phosphate Buffer pouch	7.0±0.2

**Formula adjusted, standardized to suit performance parameters

Appearance:

Leishman Stain Kit : Blue colour solution

Storage and stability

Store at 15°C - 25°C away from bright light. Use before expiry date on label.

Materials required but not provided

Clean grease-free glass slide, loops, staining rack, blotting paper, immersion oil and microscope.

Type of Specimen

Clinical specimen: Peripheral Blood samples.

Procedure

1. Use blood smears that are as thin as possible and air-dried.
2. Fully cover the smear with Leishman stain.
3. Keep for 2-3 minutes.
4. Fully cover the smear with phosphate buffer.
5. Keep for 15 minutes.
6. Dry the slides using blotting paper and air-dry.
7. Observe under microscope, 40X and 100X under oil immersion lens.

Note: Refer the instructions mentioned on the pouch for buffer preparation.

Interpretation of results

Erythrocytes: Pink

Cores of lymphocytes: Deep, dark blue to blue-violet Light blue

Cytoplasm of lymphocytes: Light blue

Nuclei of neutrophil: Deep blue to blue-violet

Granules of neutrophilic: Red

Cores of eosinophil leukocytes: Blue violet

Granules of eosinophilic leukocytes: Deep red

Cores of basophilic leukocytes: Blue violet

Warranty

- This product is designed to perform as described on the label and pack insert.
- The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

Data on file: Ultracare Diagnostics..