

Leishman Stain

Intended use

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

Summary

Leishman stain 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 serves the purpose of directly fixing the smear and eliminating a prefixing step.

Principle

Leishman stains 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

Leishman stain 0.15 g
Methanol, absolute 100 mL

Phosphate Buffer pouch 7.0±0.2

**Formula adjusted, standardized to suit performance parameters

Appearance:

Leishman Stain: Blue colour solution

Storage and stability

Store at 15°C - 30°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 (Cat. No.207090110025) 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 (equal proportion to stain).
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 to the instructions mentioned on the pouch for buffer preparation.

Interpretation of results

Erythrocytes:	Pink
Lymphocytes:	Light blue cytoplasm with purple- violet nucleus.
Neutrophil:	Pale pink cytoplasm with purple-violet nucleus.
Neutrophilic granules:	Red
Eosinophil:	Light blue cytoplasm with purple nucleus.
Eosinophilic granules:	Orange to red
Basophil:	Purple-violet nucleus with dark purple to black granules.
Monocyte:	Grey blue cytoplasm with kidney shaped purple-violet nucleus.
Platelets:	Violet granules.
Malarial parasite:	Blue cytoplasm with red chromatin.

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: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product	Pack Size
207120670250	Leishman Staining Kit	2 x 250 mL
207120670500		2 x 500 mL
207120420250	Leishman Stain	250 mL
207120420500		500 mL
207120421000		1000 mL

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.