

# AG - LEISHMAN'S STAIN (IFU)

## PRINCIPLE:

AG-Leishman's stain is a clear, blue colored solution intended for staining blood smears. It is generally used to differentiate and identify leucocytes, malarial parasites and trypanosomes. Leishman's stain is based on a methanolic mixture of polychrome methylene blue and eosin. The methanolic stock solution is stable and also serves the purpose of directly fixing the smear thereby eliminating a prefixing step.

## PACKAGE CONTENTS:

Description	Catalogue Number	Quantity
Leishman's stain	AG/STAIN/LS/22/01	200 mL

## STORAGE & STABILITY:

- Leishman's stain should be stored at 15-25°C in its original amber colored container in a cool, dark place.
- Product stored under these conditions will be stable until the expiry date shown on the product label

## TYPES OF SPECIMENS:

Blood Smears

## DIRECTIONS/PROCEDURES:

- Lay the blood-smear slide on a flat surface and cover it with the stain for 2 minutes. The stain also helps fix the smear. Make sure the smear doesn't dry up since the stain has methanol.
- After 2 minutes, add double the volume of phosphate buffer (pH 7.0) to the slide.
- Let the staining continue for 5-7 minutes without letting it dry. You should see a metallic sheen on top of the mixture. Adjust the staining time based on the reaction of the stain. If overstained, reduce the time. If poorly stained, increase the time.
- Rinse the stain off the slide with buffered water until it has a pinkish tinge.
- Place the slide on a drying rack with the smeared surface facing down to avoid collecting dust.
- Once the slide is completely dry, examine it under an oil immersion lens.

## INTERPRETATION RESULTS:

- Eosinophils: Cytoplasm stains faint pink, contains large red orange granules and bilobed nucleus.
- Neutrophils: Pale pink cytoplasm with fine mauve colored granules, include band and segmented forms (normally 3-4 lobed) of nucleus.
- Basophils: appear as a small, round, darkly stained cells with dark blue-purple granules distributed throughout its cytoplasm. The nucleus will be obscured by the granules.
- Lymphocytes: Large size lymphocytes have clear blue cytoplasm on the margins of the nucleus. In smaller lymphocytes, dark violet colored nucleus fills the entire cell and has a rim of clear cytoplasm.
- Polymorphs: stain dark purple nuclei, reddish violet granules, pale pink cytoplasm.
- Platelets: stain violet granules.
- Malarial parasites: stain red, cytoplasm stains blue.
- Trypanosomes: stain chromatin red.

## LIMITATIONS:

- Leishman's stain is primarily used for blood smear preparations and may not be suitable for other types of specimens.
- DONOT shake the stain bottle before use, else settled precipitates would be resuspended and the precipitate on the smear.
- Keep the bottle tightly closed at all times.
- The interpretation of staining results with Leishman's stain can be subjective and depends on the skill and experience of the observer.

## WARNINGS & PRECAUTIONS:

- For In-vitro Diagnostic and professional use only.
- Directions should be read and followed carefully.
- Do not use beyond the stated expiration dates.
- Safety precautions should be taken in handling, processing and discarding all clinical specimens.
- Dispose of all material in accordance with local regulations.

## SYMBOLS:



Date of manufacture



Use-by-date



Do not use if package is damaged



Manufacturer



Batch Code



Refer to the instructions



ISO



GMP



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