



# WRIGHT'S STAIN

- For in vitro use only -

Catalogue No. SW80

Our Wright's Stain can be used to stain blood smears in the detection of blood parasites.

Wright's Stain is named for James Homer Wright, who devised the stain in 1902 based on a modification of the Romanowsky stain. The stain distinguishes easily between blood cells and became widely used for performing differential white blood cell counts, which are routinely ordered when infections are expected. The stain contains a fixative, methanol, and the stain in one solution. Thin films of blood are fixed with methanol to preserve the red cell morphology so that the relationship between parasites to the red cells can be seen clearly.

## Formula per Litre

Wright's Stain ..... 1.8 g  
Methanol ..... 1000 mL

## Recommended Procedure

1. Dip slide for a few seconds in methanol as a fixative step and allow slide to air dry completely.
2. Place slide on a level staining rack and cover the slide with Wright's Stain; count the number of drops required to cover the slide. Let stand for 2 minutes.
3. Add Buffered Water to the slide (use the same amount of drops used to stain the slide). Blow gently on slide to mix the solution. Let stand for 5 minutes.
4. Flood the slide with Buffered Water. Do not pour the stain off prior to flooding or a precipitate may be deposited on the slide.
5. Wipe the underside of the slide and let the slide air dry in a vertical position.
6. Examine the slide under the microscope.

## Interpretation of Results

If malaria parasites are present, the cytoplasm stains pale blue and the nuclear material stains red. Schüffner's dots and other RBC inclusions usually do not stain or stain very pale with Wright's stain. Nuclear and cytoplasmic colors that are seen in the malarial parasites will also be seen in the trypanosomes and any intracellular leishmaniae that are present.

Refer to an appropriate text for a detailed description of characteristic morphological structures of different parasitic organisms and human cell types.

- *Make sure all slides are clean prior to making the blood smear to ensure that the stain absorbs properly*
- *Tap water is unacceptable for the rinsing solution as the chlorine may bleach the stain*
- *Finding no parasites in one set of blood films does not rule out a parasitic infection. Examine a minimum of 300 oil immersion fields before reporting no parasites found*

## Quality Control

Internal quality control of the Wright's stain must be performed regularly on known reference organisms to ensure the performance of the stain.

## **Storage and Shelf life**

Our Wright's Stain should be stored at room temperature and protected from light. Under these conditions it has a shelf life of 52 weeks from the date of manufacture.

## **References**

1. Baron EJ, Tenover FC, Tenover FC. *Bailey & Scott's diagnostic microbiology*. St. Louis: Mosby Company, 1990.
2. Isenberg HD, Ed. *Clinical microbiology procedures handbook*, Vol 1 & 2. Washington, DC: ASM, 1992.
3. Murray PR, Baron E, Pfaller M, Tenoer F, Tenover FC, Tenover FC, Eds. *Manual of clinical microbiology*. 7th ed. Washington: ASM, 1999.

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