

## Intended use

Field's Stain B is a histological method for staining blood smears.

## Summary

Field's stain is a version of a Romanowsky stain, used for rapid processing of the specimens. Polychromated methylene blue and eosin stains selectively basophilic and acidophilic cellular elements to demonstrate blood cells and hemo-parasites. It is used for staining thick blood films to discover malarial parasites.

## Principle

Field's Stains contain methylene blue and eosin. These basic and acidic dyes induce multiple colors when applied to cells. The fixative, methanol does not allow any further change in slide. The basic component of white cells (cytoplasm) is stained by acidic dye, and they are described as eosinophilic or acidophilic. The acidic component (nucleus with nuclei acid) takes blue to purple shades of the basic dye and is called basophilic. The neutral component of the cells is stained by both dyes.

## Reagents / Contents

### Field's Stain B

Eosin Y	2.60 g
Disodium hydrogen phosphate	10.0 g
Potassium dihydrogen orthophosphate	12.50 g
Distilled water	974.90 ml

\*\*Formula adjusted, standardized to suit performance parameters

## Appearance

**Field's Stain B:** Orange coloured solution.

## Storage and stability

All reagents are stable at room temperature until the expiry date stated on each label. Do not spray fixative onto open fire. Avoid inhaling the spray.

## Materials required but not provided

Clean grease-free glass slide, staining rack, blotting paper, immersion oil , Field's Stain and microscope.

**Type of Specimen:** Clinical specimen: Blood samples.

## Procedure

1. Prepare a thick blood film.
2. Fix blood film with Heme-Fixative for 1 minute and air dry.
3. Wash off fixative with tap water and air dry.
4. Cover the blood smear with Field's B stain and keep for 1 minute.
5. Gently wash the slide with tap water.
6. Immediately add an equal volume of Field's A stain and stain for 1 minute.
7. Rinse the slide with tap water and place it upright to drain and dry.
8. Observe under microscope, 40X and 100X under oil immersion lens.

## Interpretation of results

Neutrophil:	Segmented polymorph with purple
Eosinophil:	granules Polymorph with large orange
Basophil:	granules Polymorph with large blue granules
Lymphocyte:	Dark blue nuclei with clear blue cytoplasm

Monocyte: Kidney shaped nucleus with smoky blue cytoplasm  
Platelet: Small pale bluish cells  
Red blood cells: Pinkish red cells  
Malaria Parasites: Pale bluish with Red Schuffner's Dots (Trophozoite)

### 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

1. Data on file: UltraCare Diagnostics .

### 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.