

## Intended use

Used for staining of peripheral blood and bone marrow smears.

## Principle

The polychromatic staining solutions such as Wright stain contain methylene blue and eosin. These basic and acidic dyes induce multiple colors when applied to cells. Methanol acts as fixative and also as solvent. The fixative does not allow any further change in the cells and makes them adhere to the glass slide. The basic component of white cells (i.e. cytoplasm) is stained by acidic dye and they are described as eosinophilic or acidophilic. The acidic components (e.g. nucleus with nucleic acid) take blue to purple shades of the basic dyes and they are called basophilic. The neutral components of the cell are stained by both the dyes.

## Reagents / Contents

a) Wright stain	1.0 g
Glycerol	50.0 mL
Methanol, absolute	50.0 mL
b) Stock stain solution	4.0 mL
Acetone	3.0 mL
Phosphate buffer (1/15 M, pH 6.8)	2.0 mL
Distilled water	31.0 mL
Both (a) and (b) are mixed in coupling jar.	

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

**Appearance:** Dark blue coloured solution.

## Storage and Stability

Store at 15-25°C in tightly closed container and away from bright light. Use before expiry date on label.

## Materials required but not provided

Clean grease-free glass slide, methanol for fixation of smear, staining rack, blotting paper, immersion oil, phosphate buffer (pH 7.0) and microscope.

## Type of Specimen

Peripheral blood and bone marrow smears.

## Procedure

1. Prepare a thin smear having head, body & tail and air-dried.
2. Fix smears for 3 minutes with methanol or with Heme fixative.
3. Fully cover the smear with 1:1 solution of Wright's Stain and distilled water / phosphate buffer (pH 7.0) solution for 8-10 minutes.
4. Rinse gently with distilled water.
5. Dry the slides using blotting paper and air-dry.
6. Observe under microscope, 40X and 100X under oil immersion lens.

### Interpretation of Results

Erythrocytes:	Pink
Lymphocytes:	Blue cytoplasm with blue-violet nucleus
Eosinophil:	Blue violet nuclei
Eosinophilic Granules:	Deep red
Neutrophil:	Deep blue to blue-violet
Neutrophil granules:	Red
Basophil:	Blue violet nuclei
Monocytes:	Grey blue kidney shaped
Malarial Parasite:	Clear 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: 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.