

B-152, MACNEAL'S TETRACHROME STAIN

Fixation: None. Prepare thin smears by streaking a drop of blood over a scrupulously clean slide using a second slide or a cover glass. Air-dry quickly at room temperature. Smears must be thin, preferably only one cell thick.

Staining:

1. Place 1 ml of **MacNeal's Tetrachrome Stain** (B-152-1) on the blood film for 1-3 minutes.
2. Add 2 ml of distilled water or preferably **Phosphate Buffer** (B-152-2) and allow to stand twice as long as in step 1. Flood off the stain and wash with distilled water or preferably **Phosphate Buffer** (B-152-2) until the thin portions of the stained film are pink.
3. Dry by blotting carefully.

Stain Results:

Erythrocytes	Yellowish-Red
Polymorphonuclear neutrophils	Dark Blue nucleus. Reddish lilac granules Pale Pink cytoplasm
Eosinophilic leucocytes	Blue nuclei, red to orange red granules, blue cytoplasm
Basophilic leucocytes	Purple or dark blue nucleus, Dark purple (almost black) granules
Lymphocytes	Nuclei dark purple, cytoplasm Sky blue
Platelets	Violet to purple granules

References:

Conn, H.J., Biological Stains, 4th ed., Biotech Publications, Geneva, 1940, p 173.
Clark, G., (ed), Staining Procedures, 3rd ed., Willaims & Wilkins Co., Baltimore c 1973, p124.

