

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:

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| 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.

