



Wright Staining

Reagents Needed:

Wright's Stain, Regular Formula
or Wright's Stain, Rapid Formula
Buffer Solution, Giordano, pH 6.4 (M/15), for Wright Staining

RICCA CHEMICAL COMPANY Cat. No. 9360
RICCA CHEMICAL COMPANY Cat. No. 9350
RICCA CHEMICAL COMPANY Cat. No. 1450

Recommended Method:

1. Prepare very thin smears (blood films) of capillary or fresh venous blood on new, scrupulously clean slides.
2. Air dry quickly at room temperature.
3. If the smears are to be kept for any length of time before staining, fix by flooding with Methanol for 5 minutes, then blot and dry at room temperature. Fixation is usually not necessary for smears that are to be immediately stained.
4. Apply a measured number of drops of undiluted Wright's Stain, Regular Formula, or Wright's Stain, Rapid Formula, covering slides completely, with the smears facing upward.
5. Allow 1 minute staining time for Regular Wright's Stain, or 15 seconds staining time for Rapid Wright's Stain. Staining time may be increased to suit user preference, up to about 3 minutes for Regular Wright's Stain and about 45 seconds for Rapid Wright's Stain.
6. Gently add Giordano Buffer (preferred) or purified Water at about 2 times the number of drops of stain used and mix by blowing gently on the surface or rocking the slide.
7. Leave the diluted stain on the slide for twice the undiluted stain time (from step 5).
8. Keeping slides facing upward, flood off the stain and wash well with Giordano Buffer (preferred) or purified Water until the thin portions of the stained film appear pink to the naked eye.
9. If necessary, remove the stain on the back of the slides by cleaning with alcohol-moistened gauze.
10. Allow slides to air dry by resting an edge on a blotter.

Satisfactory Staining Results:

A well-stained smear will appear pink macroscopically.

Erythrocytes: yellowish-red

Polymorphonuclear Neutrophilic Leukocytes: dark purple-violet nuclei, reddish lilac granules, pale pink cytoplasm

Eosinophilic Leukocytes: blue-violet nuclei, red to orange-red granules, blue cytoplasm

Basophilic Leukocytes: purple to dark blue nuclei, dark purple (almost black) granules

Lymphocytes: dark purple nuclei, sky blue cytoplasm

Platelets: violet to purple granules

Unsatisfactory Staining Results:

Precipitation: should not occur. May be due to insufficient or incorrect washing, allowing the stain to dry on the slide, a dirty slide, dust, or an overconcentrated stain.

Excessively blue erythrocytes and dark blue structureless nuclei: May be due to insufficient washing, an overly thick film, overstaining, or excessive alkalinity (high pH) of water, buffer, or stain.

Excessively red erythrocytes and pale gray-blue nuclei: May be due to inadequate staining, prolonged washing, or excessive acidity (low pH) of water, buffer, or stain.

This is a typical staining procedure. These reagents may be suitable for other staining procedures. Consult staining reference books or standard operating procedures for other suitable uses of these products.