

Wright's Stain

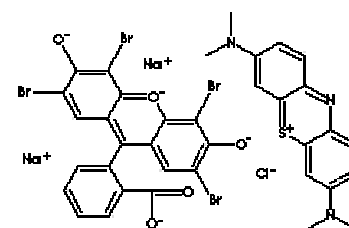
Catalogue Number: CD004

Brief Description: It is named for James Homer Wright, who devised the stain, a Romanowsky type metachromatic stain made by mixing old or specially treated methylene blue dye with eosin in a methanol diluent. Wright's stain is a technique in histology that is used to make the differences between cells visible under light microscopy. It is commonly used in the examination of peripheral blood smears and bone marrow aspirates. Basic components of the cell, such as hemoglobin or certain inclusions or granules, will unite with the acidic portion of the stain, eosin, and are said to be eosinophilic. These components are stained varying shades of pink or red. Acidic cell components, such as nucleic acids, reactive cytoplasm, etc. take up the basic dye components, methylene azure, and stain blue or purple. pH must be carefully controlled through the use of a buffer of 6.4-6.7.

Application: Staining and General Differentiation of Blood Corpuscles

Pack Size: 100 ml

Storage: RT



Experimental Procedures (for blood smear):

- Fix the blood film for at least 30 seconds in absolute methanol.
- Remove methanol by tilting the slide.
- Apply Wright's Stain Solution for 2 min on a horizontally positioned slide.
- Add aliquot of the Giordano Buffer Solution (Cat#: CD043) without any of the stain running off the slide. Gently mix the buffer and stain without touching the surface of the blood film on the slide (a metallic sheen will appear on the surface of the staining solution mixture).
- Let stand for 3 min.
- Rinse the slide with (distilled) water for 30 seconds.
- Dry the slide in a tilted position; do not blot-dry.
- Mount a coverglass if desired.

Troubleshooting:

- ✧ The stain is too red and poor nuclear stain: the pH is too acidic (<6.4) the stain will take on a pinkish tint, and nuclear structures will be poorly stained.
- ✧ Blue-black color poorly defined structure: the pH is too basic (>6.7), which will cause all intracellular structures, nuclei, etc. to be dark blue in color, with poorly defined structure.

