Wright-Giemsa Staining Kit

Catalog No.: RA20127

Basic Information

Product name	Wright-Giemsa Staining Kit
Sizes	100 mL，500 mL
Storage	RT
Shipping	RT
Validity	24 months

Product Introduction

Wright's stain is a composite dye composed of the acidic dye Eosin and the basic dye Methylene Blue, which provides excellent differentiation of protoplasm. Giemsa stain is a mixture of Azure II and Eosin. Its staining principle and results are essentially the same as Wright's method. Giemsa stain has a strong affinity for cytoplasm and effectively demonstrates basophilic characteristics, especially in blood and bone marrow cells. It clearly stains azurophilic, eosinophilic, and basophilic granules. However, it tends to overstain nuclei and poorly reveals nuclear structure. Therefore, Giemsa stain is often used in combination with Wright's stain.

EnkiLife Wright-Giemsa Stain is prepared by grinding and mixing imported Wright's and Giemsa dyes. It produces clear and distinct cellular staining and is commonly used for blood smears, bone marrow smears, and bacterial staining. Cytoplasm appears red, nuclei and bacteria appear blue, and eosinophilic granules appear orange-red. Neutral glycerol is added to the stain to prevent methanol evaporation or oxidation and to enhance the clarity of blood cell staining. This stain consists of a Wright-Giemsa composite staining solution and a phosphate buffer, which can be used either by mixing in equal parts or by treating the specimen sequentially.

Product Components

Components	2x 100mL	2x 500mL
Reagent (A): Wright-Giemsa Stain	100 mL	500 mL
Reagent (B): Phosphate Buffer	100 mL	500 mL

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Materials Required (Not Supplied)

1. Microscope slides, staining rack, microscope.
2. Distilled or deionized water.

Experimental procedure

1. Prepare blood, bone marrow, or bacterial smears using standard methods. Allow smears to air-dry. Place the slide on a staining rack.
2. Add 0.5–1 mL of Wright-Giemsa Stain to cover the smear. Ensure the entire specimen is covered. Stain for 20–60 s.
3. Add twice the volume of phosphate buffer. Use a dropper, pipette, or bulb to gently mix the two solutions. Stain for: Blood smears: 10–15 min; Bone marrow smears: 25–30 min; CSF smears: 10–15 min.
4. Alternatively, mix Wright-Giemsa Stain and phosphate buffer at a 1:2 ratio to prepare the working solution. Apply this working solution to the smear and incubate at room temperature for 10–30 min.
5. Gently rinse the slide with tap or distilled water from one edge (do not pour off the stain first; rinse slowly to avoid precipitate deposition). Rinse for ~30 s.
6. Air-dry and examine: first scan under low magnification, then use oil immersion for detailed observation.

Staining Results

Component	Color
Bacteria, nuclei	Blue
Cytoplasm, hemoglobin, eosinophilic granules	Pink or orange-red

Notes

1. Smears should be evenly spread to ensure optimal staining.
2. Do not pour off the stain or rinse the slide directly during staining. Rinse gently from one edge to avoid dye precipitation.
3. The staining solution can be reused, but not repeatedly. Filter before reuse if precipitate is present.
4. If overstaining occurs, destain briefly with methanol or ethanol. Re-staining is not recommended.
5. Adjust staining time or working solution concentration if staining is too weak or too strong.

6. For your safety and health, wear a lab coat and disposable gloves during operation.

This product is for research use only!