

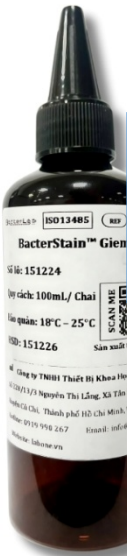
BacterLab Division



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BacterStain™
Giemsa



MICROBIOLOGICAL STAIN

BacterStain™ Giemsa

A dye used for microbiology and hematology, commonly employed for staining cell and tissue samples in bacteriological, virological, and hematological studies.

Code: 04003



1. INTENDED USE

BacterStain™ Giemsa is a stain primarily used for staining blood cells and microorganisms. It helps differentiate various cell types in hematological examinations, as well as staining parasites such as *Plasmodium* (the causative agent of malaria) in microbiological studies.

2. PRINCIPLES

BacterStain™ Giemsa works by binding to the DNA and proteins within cells, producing distinct colors that allow differentiation of cell components. In blood samples, red blood cells and white blood cells stain differently, making it easier to identify cell types. The stain also highlights parasites such as *Plasmodium* within red blood cells.

3. TYPICAL COMPOSITION

For 1 liter of stain

Giemsa powder	7,6 g
Glycerol	250 mL
Methanol	750 mL

4. PREPARATION

The stain are ready-to-use, no preparation required.

5. INSTRUCTIONS FOR USE

- Prepare the sample: Spread the blood or cell sample onto the slide, let it dry, and fix the sample with 95% methanol for 5 – 10 minutes.
- Dilute 5 mL of Giemsa stock solution with 65 mL of distilled water to make the staining solution.
- Rinse the slide in distilled water about 15 times to remove impurities and excess solution.
- Immerse the slide in the diluted Giemsa solution for 2 hours to allow the dye to penetrate the cells.
- Dip the slide into a 1% acetic acid solution once to brighten the dye.
- Blot dry the glass slide gently with tissue paper.
- Immerse the slide in 100% ethanol until the solution runs out with only a faint blue color remaining.
- Dip the slide into xylene I solution about 10 times to remove impurities and alcohol solvent.
- Continue dipping the slide into xylene II solution about 10 times for further cleaning.
- Mount the coverslip with Permount.

6. RESULTS

- Iron/ hemosiderin: Blue.
- Red blood cells: Yellow.
- Neutrophils: Purple.
- Eosinophils: Red.

- Other types of cells: Nucleus is purple-red, cytoplasm is light blue.

7. STORAGE AND TRANSPORT CONDITIONS

- Storage: 18 – 25°C.
- Transportation: Ambient temperature.

8. PACKAGING

- Packaging: 100 mL/ bottles or according to the customer's request..

9. SHELF LIFE

- Expiration Date: 24 months from the manufacturing date.