

Gram Color Kit



Complete kit used for bacteria Gram staining.

• CONTENTS (4 Bottles)

(The reagents are contained in glass and PP bottles, sealed by thermoinduction.)

Crystal Violet Solution	100 mL
Lugol PVP Solution	100 mL
Decolorizing Solution	100 mL
Safranin Solution	100 mL
1 Instruction sheet	

• PROCEDURE

Preparation and fixing

On clean slides, make a smear of the culture or pathological material. Leave to dry in the air and fix by heat, passing rapidly over the flame. Do not overheat the sample when fixing. Other fixing methods may be used.

Staining

1. Cover the slide with the Crystal Violet Solution. Wait 1 minute, then rinse gently with water.
2. Cover the slide with the Lugol PVP Solution. Wait 1 minute.
3. Decolor with the decolorizing Solution for as long as the preparation releases color (about 30-60 seconds), then rinse delicately with water.
4. Cover the slide with the Safranin Solution. Wait 30-60 seconds, then rinse delicately with water.
5. Dry.
6. Examine the preparation under the microscope with the objective for immersion.

• INTERPRETATION

Combined with direct observation of the cell morphology, this staining constitutes the first level in the taxonomic classification of prokaryotes. Gram staining is based on the property of Crystal Violet of combining with iodine to form compounds that cannot be decolorized with alcohol or with an alcohol-acetone mixture. Some bacteria have a special affinity for this reaction and, once stained with crystal violet, do not lose the color if treated with alcohol or alcohol-acetone mixture, thus retaining the blue coloring (Gram-positive bacteria). Others lose the blue color and are stained by Safranin, taking a red color (Gram-negative bacteria).

• QUALITY CONTROL FOR USE

Each lot of Gram Color Kit is subjected to quality control using a culture of *Escherichia coli* ATCC 25922 for the test for Gram-negative bacteria (red color) and a culture of *Staphylococcus aureus* ATCC 25923 for the test for Gram-positive bacteria (blue color).

• STORE

Store Gram Color Kit at 10-25°C in the original packaging. Keep away from sources of heat and avoid excessive changes of temperature. In such conditions the product Gram Color Kit will be valid until the expiry date shown on the label. Do not use beyond that date. Eliminate without using if there are signs of deterioration (changes in the color of the solutions or presence of substantial precipitates).

• PACKAGE

Cat. No : MB-80293 Gram Color Kit	4 x 100 mL
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