

# Modified Gram Staining Kit

(Cat# K1429-30, -125; Modified Brown & Brenn; Store at RT)

## I. Introduction:

The Modified Gram Staining Kit (Modified Brown & Brenn) is intended for the demonstration and differentiation of Gram-positive and Gram-negative bacteria.

**Gram Positive Bacteria: Blue; Gram Negative Bacteria: Red**

**Other Tissue: Slightly Yellow-Pink**

**Nuclei: Red**

## II. Application:

- Histological applications
- For *in vitro* diagnostic use

## III. Sample Type:

- Any well fixed paraffin embedded tissue sections.
- Air dried smear

## IV. Kit Contents:

Components	K1429-30	K1429-125	Part Number	Storage Temperature
Gentian Violet Solution	30 ml	125 ml	K1429-XX-1	RT
Lugol's Iodine Solution	30 ml	125 ml	K1429-XX-2	RT
Gram's Decolorizer Solution	30 ml x 2	125 ml	K1429-XX-3	RT
Safranin O Solution	30 ml	125 ml	K1429-XX-4	RT
Picric Acid - Acetone Solution (0.1%)	30 ml	125 ml	K1429-XX-5	RT

## V. User Supplied Reagents and Equipment:

- Distilled water
- Coplin jars
- Xylene or Xylene substitute
- Forceps
- Absolute alcohol
- Synthetic resin

## VI. Shipment and Storage:

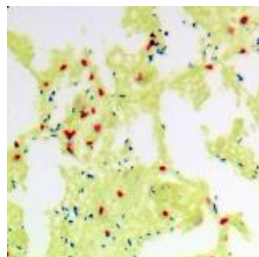
All the reagents are shipped and stored at room temperature.

## VII. Reagent Preparation:

- Do not use if reagents become cloudy.
- Do not use past expiration date.
- Use caution when handling reagents.

## VIII. Procedure (Standard):

1. Deparaffinize sections if necessary and hydrate to distilled water.
2. Cover tissue section with Gentian Violet Solution and incubate for 2 minutes.
3. Rinse slide in distilled water to remove excess stain.
4. Cover tissue section with Lugol's Iodine Solution and incubate for 1 minute.
5. Rinse slide in running tap water to remove excess Iodine.
6. Dip 1 time in distilled water.
7. Apply Gram's Decolorizer dropwise until color no longer bleeds off section.
8. Rinse slide quickly in distilled water (2-5 seconds).
9. Cover tissue section with Safranin O Solution and incubate for 4 minutes.
10. Rinse slide quickly in distilled water to remove excess stain.
11. Dip once in absolute alcohol and blot dry.
12. Cover tissue section with Picric Acid - Acetone Solution (0.1%) and incubate with agitation for 2-10 seconds.
13. Dehydrate slide very quickly in 3 changes of absolute alcohol.
14. Clear in 2 changes of xylene or xylene substitute, and mount in synthetic resin.



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FOR RESEARCH USE ONLY! Not to be used on humans.