

Gram Staining Kit

(Cat# K1428-30, -125; Store at RT)

I. Introduction:

The Gram Staining Kit is intended for the demonstration and differentiation of Gram-positive and Gram negative bacteria. The stain is named after the Danish scientist Hans Christian Gram.

Gram Positive Bacteria: Blue; Gram Negative Bacteria: Red

Other Tissue: Yellow

Nuclei: Red

II. Application:

- Histological applications
- For *in vitro* diagnostic use

III. Sample Type:

- Any well fixed paraffin embedded tissue sections.

IV. Kit Contents:

Components	K1428-30	K1428-125	Part Number	Storage Temperature
Gentian Violet Solution	30 ml	125 ml	K1428-XX-1	RT
Lugol's Iodine Solution	30 ml	125 ml	K1428-XX-2	RT
Gram's Decolorizer Solution	30 ml x 2	125 ml	K1428-XX-3	RT
Carbol Fuchsin Counterstain	30 ml	125 ml	K1428-XX-4	RT
Tartrazine Solution	30 ml	125 ml	K1428-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:

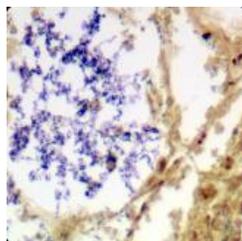
All the reagents are shipped and stored at room temperature.

VII. Reagent Preparation:

- Do not use if reagents become cloudy.
- Do not use past expiration date.
- Use caution when handling reagents.
- All glassware used in this procedure should be chemically cleaned and rinsed thoroughly in distilled water.
- Failure to adequately remove the alcohol used in deparaffination will result in reduction of the chromic acid solution.
- Reduction of the chromic acid solution will result in a change in color from orange to brown. Discard the reagent if color change is noted.
- Do not use metal forceps to remove slides from reagents. Use plastic forceps only.
- Prewarm all reagents to room temperature prior to use.

VIII. Procedure (Standard):

1. Deparaffinize sections if necessary and hydrate to distilled water.
2. Apply adequate Gentian Violet Solution to completely cover tissue section and incubate for 1 minute.
3. Rinse slide in distilled water to remove excess stain.
4. Apply adequate Lugol's Iodine Solution to completely cover tissue section and incubate for 1 minute.
5. Rinse slide in gently running tap water to remove excess iodine.
6. Place slide in Gram's Decolorizer until color no longer bleeds off section.
7. Rinse slide quickly in gently running tap water.
8. Apply adequate Carbol Fuchsin to completely cover tissue section and incubate for 1-2 minutes.
9. Rinse slide quickly in gently running tap water to remove excess stain.
10. Apply Tartrazine Solution and incubate for 15 seconds.
11. Rinse slide 1 time in absolute alcohol.
12. Dehydrate slide quickly in 3 changes of absolute alcohol.
13. 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.