

芽孢染色液（Scharffer-Fulton 法）

货号：G1133

规格：2×50mL

保存：室温，避光保存，有效期 1 年。

产品组成：

名称	2×50mL	保存
试剂 A：孔雀石绿染色液	50mL	室温，避光
试剂 B：番红 O 染色液	50mL	室温，避光

产品介绍：

芽孢具有高度的折光性，外膜致密，渗透性低，着色和脱色均较困难。在加热条件下进行染色时，染料不仅进入菌体也可进入芽孢内，进入菌体的染料可被酒精脱色，而芽孢上的染料仍保留，经复染剂复染后，菌体和芽孢呈现出不同的颜色。

本试剂盒采用冷染法对芽孢进行染色，相对于热染法更安全也更便于操作。染色后芽孢着绿色，细菌着红色，颜色清晰，对比明显，便于观察。

操作步骤：（仅供参考）

1. 制作一适当厚度的细菌涂片，自然干燥，通过火焰加热固定（快速通过火焰外焰 4 次），或者 40℃ 恒温台自然晾干。
2. 滴加适量染色液 A 于涂片上染色 10min。
3. 水洗至无明显染色液脱出。
4. 滴加染色液 B 复染约 2-3 分钟，水洗至无染液脱出为止。
5. 待干后油镜观察。

染色结果：

菌体	红色
芽孢	绿色

注意事项：

1. 供芽孢染色用的培养物应控制菌龄，要求大部分芽孢仍保留在菌体内为宜。
2. 请穿实验服并戴一次性手套操作。

相关产品：

G1010 姬姆萨染色液（工作液）

G1020 瑞氏-姬姆萨复合染液

G1060 革兰氏染色液

G1160 石炭酸复红染色液

Spore Stain Kit(Scharffer-Fulton Method)

Cat: G1133

Size: 2×50mL

Storage: RT, avoid light, valid for 1 year.

Kit Components

Reagent	2×50mL	Storage
Reagent A: Malachite Green Solution	50mL	RT, avoid light
Reagent B: Safranin O Solution	50mL	RT, avoid light

Introduction

The spores have high refraction, dense outer membrane, low permeability, and difficult to color and decolorize. When dyeing under heating condition, the dye not only enters into the cell but also into the spore. The dye entering into the cell can be decolorized by alcohol, while the dye in the spore still remains. After re-dyeing with counter stain, the cell and spore show different colors.

Compared with heat staining, this kit is safer and easier to operate. After dyeing, the spores are green and the bacteria are red, with clear color and obvious contrast, which is convenient for observation.

Protocol(for reference only)

1. Make a bacterial smear with appropriate thickness, dry it naturally, heat it with flame for fixation (pass through the outer flame for 4 times quickly), or dry it naturally at 40 °C.
2. Add proper amount of Reagent A to the smear for 10 min.
3. Wash with water until no staining solution comes out.
4. Add Reagent B for 2-3 min and wash with water until no dye comes out.
5. Observe with oil microscope after drying.

Result

Thalli	Red
Spore	Green

Note

1. The culture used for spore staining should be controlled for the age of bacteria, and most of spores should be kept in the body of bacteria.
2. Please wear experimental clothes and disposable gloves.

Related Products

G1010 Giemsa Stain Solution (Working Solution)

G1020 Wright-Giemsa Stain Solution

G1060 Gram Stain Kit

G1160 Carbol-Fuchsin Solution