V02

荚膜染色试剂盒

货号：G1130
规格：2×50mL/2×100mL/2×250mL
保存：室温保存，有效期 1 年。

产品组成：

名称	2×50mL	2×100mL	2×250mL	保存
试剂（A）：结晶紫染色液	50mL	100mL	250mL	室温，避光
试剂（B）：硫酸铜溶液	50mL	100mL	250mL	室温

产品介绍：

细菌荚膜是细菌细胞壁外的一层粘液性多糖类物质。其对染料的亲和力弱，不易着色，通常采用负染色法染色，即使菌体和背景着色而荚膜不着色，因此在菌体周围呈一透明圈。由于荚膜含水量多，疏松且较薄，染色时一般不用热固定，以防荚膜皱缩变形。荚膜染色法用于有荚膜细菌如肺炎链球菌、流感嗜血杆菌、炭疽芽胞杆菌及产气荚膜梭菌的鉴定。

操作步骤：(*仅供参考*)

1. 制作一适当厚度的荚膜菌涂片，在空气中自然干燥，不需加热固定。
2. 滴加适量结晶紫染色液于玻片上（以盖满菌膜为度），染色 5-7 分钟，倾去多余染色液晾干。
3. 滴加等量硫酸铜稍摇晃分化后倾去，切勿用流水冲洗。冲洗要适度，保证背景呈紫色为宜。
4. 吸水纸吸干，并立即加 1-2 滴香柏油于涂片处，以防止结晶的形成。
5. 100x 油镜下观察。

实验结果：

背景	蓝紫色
菌体	紫色
荚膜	无色或浅紫色

注意事项：

1. 染色程度可通过改变染色时间做适当调整，以菌体和背景相近为宜。
2. 脱色时不可用水冲洗，必须用试剂（B），避免背景过度脱色影响观察。
3. 不能加热干燥或固定涂片，以避免水冲洗玻片，防止荚膜皱缩或脱失。
4. 为了您的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-姬姆萨复合染色液
G1060 革兰氏染色试剂盒
G1160 卡宝品红染色液

Tel: 400-968-6088 https://www.solarbio.com E-mail: sales-china@solarbio.com
Address: No. 85, Liandong U Valley, Middle Zone, 101102, Tongzhou Dist, Beijing, China

Capsul Stain Kit

Cat: G1130
Size: 2×50mL/2×100mL/2×250mL
Storage: RT, valid for 1 year.

Kit Components

Reagent	2×50mL	2×100mL	2×250mL	Storage
Reagent A: Crystal Violet Solution	50mL	100mL	250mL	RT, avoid light
Reagent B: Copper Sulfate Solution	50mL	100mL	250mL	RT

Introduction

Most bacterial capsules are composed of polysaccharide. The capsule differs from the slime layer that most bacterial cells produce in that it is a thick, detectable, discrete layer outside the cell wall. Bacterial capsules are non-ionic, so neither acidic nor basic stains will adhere to their surfaces. Therefore, the best way to visualize them is negative stain.

For examination under the microscope, stain the bacteria and background darker than the capsule, which doesn't stain. Capsular material is very moist (slimy) and any heating will cause it to shrink. So do not heat-fix. Also, heating may cause the bacterial cell to shrink resulting in a clear zone around the cell - which may cause cells which don't have capsules to appear.

Protocol(*for reference only*)

1. Prepare a smear of *Capsulate bacteris*, allow the smear to dry and then fix. (***Note： DO NOT heat or blot dry!)***
2. Drip an appropriate amount of Crystal Violet Solution onto the section (to cover the bacterial membrane), stain for 5-7 min, and drain excess staining solution to air dry.
3. Add an equal amount of Copper Sulfate Solution, shake slightly to differentiate, and then pour it away. Do not rinse with running water. Rinse moderately to ensure a purple background.Blot dry with bibulous paper. then add 1-2 drops cedar wood oil to prevent crystal formation in ice cream.
4. View under oil immersion lens.

Result

Background	Blue to Purple
Thalli	Purple
Capsul	Colorless or Pale Purple

Note

1. The degree of staining can be adjusted appropriately by changing the staining time, preferably with similar bacterial bodies and backgrounds.
2. During decolorization, do not rinse with water. Reagent (B) must be used to avoid excessive background decolorization affecting observation.
3. The section shall not be heated, dried or fixed to avoid washing the glass with water and preventing the capsule from shrinking or losing.
4. Please wear the experimental clothes and disposable gloves.