

植物组织染色试剂盒（台盼蓝法）

货号：G4808

规格：2×50mL

保存：室温，避光保存，有效期 6 个月。

产品组成：

名称	2×50mL	保存
试剂(A):植物台盼蓝染色液	50mL	室温，避光
试剂(B):植物组织保存液	50mL	室温

产品介绍：

台盼蓝 (Trypan Blue) 或称台盼兰、锥虫蓝，是一种细胞活性染料，也是检测植物死亡组织的常用方法，可用于植物真菌或病虫害损伤面积的染色显示。这种重氮染料还用于组织学和医学中，通过对死亡细胞的着色来区分死活细胞。

植物组织染色试剂盒（台盼蓝法）无需组织固定，可取新鲜组织直接染色。本产品不含水合氯醛，性质稳定且危险性小。能够将植物组织或叶片上损伤的部位染成蓝色。

自备材料：

培养皿、95%乙醇、解剖镜

操作步骤：（仅供参考）

1. 新鲜植物叶片或根等组织取材，建议控制厚度在 2mm 以内。（见注意事项 1）
2. 平放在容器中，用植物台盼蓝染色液浸没组织染色，通常幼嫩组织染色控制在 1 小时内，成熟组织控制在 12 小时之内。（见注意事项 2、3）
3. 取出叶片用 95%乙醇洗去多余染色液，然后浸于 95%乙醇中封口脱色至少 12 小时。
4. 蒸馏水浸洗平衡 30min，将组织转移到载玻片或其他观察平面上，滴加植物组织保存液并盖压盖玻片用于观察。

染色结果：

被感染死亡的细胞	蓝色
组织背景	淡绿色或黄色

注意事项：

1. 为方便后续观察和保存，不平整的组织建议适当裁剪使组织服帖。
2. 由于植物组织自身特性，幼嫩组织和成熟组织组织渗透能力差异巨大，因此建议根据实际染色情况调整染色时间。如成熟组织染色较慢可将染色液预热至 60-80℃后浸没染色。
3. 染色液可回收使用，一般可循环 3-4 次，具体循环次数和使用时间视实际情况而定。
4. 为了您的安全和健康，请穿实验服并戴一次性手套操作。

Plant Tissue Stain Kit(Trypan Blue Method)

Cat: G4808

Size: 2×50mL

Storage: RT, avoid light, valid for 6 months.

Kit Components

Reagent	2×50mL	Storage
Reagent(A): Plant Trypan Blue Stain Solution	50mL	RT, avoid light
Reagent(B): Plant Tissue Preservation Solution	50mL	RT

Introduction

Trypan blue is a cell reactive dye and a common method to detect dead tissues of plants. It can be used to dye and display the damaged area of plant fungi or pests. This diazo dye is also used in histology and medicine to distinguish dead and living cells by coloring dead cells.

The Plant Tissue Stain Kit(Trypan Blue Method) does not require tissue fixation, and can be directly stained with fresh tissue. This product does not contain chloral hydrate, which is stable and less dangerous. The damaged parts on plant tissues or leaves can be dyed blue.

Self Provided Materials

Culture Dish, 95% Ethanol, Dissecting Mirror

Protocols(for reference only)

1. The thickness of fresh plant leaves or roots should be controlled within 2mm. (see Note 1)
2. Place it flat in the container and immerse the tissue in Plant Trypan Blue Stain Solution for staining. Generally, the staining of young tissues is controlled within 1 hour and that of mature tissues within 12 hours. (see Note 2 and 3)
3. Take out the leaves and wash off the excess dye with 95% ethanol, then immerse them in 95% ethanol and seal them for decoloration for at least 12 hours.
4. Soak with distilled water for 30min, transfer the tissue to a slide or other observation plane, drop the Plant Tissue Preservation Solution and cover the cover glass for observation.

Result

Dead Cell	Blue
Background	Pale Green or Yellow

Note

1. In order to facilitate follow-up observation and storage, it is recommended to cut the uneven tissue properly to make it fit.
2. Due to the characteristics of plant tissues, the permeability of young and mature tissues is very different, so it is recommended to adjust the dyeing time according to the actual dyeing situation. If mature tissues are stained slowly, the staining solution can be preheated to 60-80 °C and then immersed for staining.
3. The dye solution can be recycled, generally 3-4 times. The specific number of cycles and use time depend on the actual situation.
4. For your safety and health, please wear experimental clothes and disposable gloves.