

# TTC 染色液(2%)

货号: G3005

规格: 100mL/500mL

**保存:** 2-8℃, 避光保存, 有效期1年。

### 产品介绍:

2,3,5-氯化三苯基四氮唑 (TTC)是脂溶性光敏感复合物,常用于检测种子的生存能力以及检测哺乳动物组织的缺血梗塞。它是呼吸链中吡啶—核苷结构酶系统的质子受体,能与正常组织中的脱氢酶反应而呈红色。正常脑组织和有活力种子胚组织活细胞中的脱氢酶可以将 TTC 还原成不溶性的红色稳定的三苯基甲膜 (TTF),如果脑组织细胞或胚种细胞死亡或生活力衰退,则不能染色或染色较浅。因此可以根据染色部位和染色深浅程度来鉴定脑组织或者种子的活力。

### 操作步骤:(仅供参考)

- 1. 按照实验设计自行制作组织模型,切片。
- 染色:取组织或者切片浸泡于 TTC 染色液(2%)中,入恒温箱内 30-37℃孵育 15min-30min。(见注意事项 2)
- 3. 染色后用清水清洗,如需保存,可用福尔马林或者多聚甲醛固定液固定。
- 4. 观察染色情况,拍照记录。

### 染色结果:

正常组织	红色
脑梗死区	不被染色

## 注意事项:

- 1. TTC 溶液若变成红色则不可再用。
- 2. 显色时要使组织切片全部浸入 TTC 染色液中,如果使用孔板染色,建议将孔板置于摇床上慢摇染色,防止脑片贴在板底影响渗透。一般一张 1-2mm 的脑切片需要 1-2mL 的染色液,若需要同时染色多张脑切片,建议根据样本量适当增加染色液用量从而保证充分浸透染色。
- 3. TTC 染色后应立即观察,不可久放。
- 4. 为了您的安全和健康,请穿实验服并戴一次性手套操作。













# TTC Solution, 2%

Cat: G3005

Size:100mL/500mL

**Storage:** 2-8°C, avoid light, valid for 1 year.

#### Introduction

2,3,5-triphenyltetrazolium chloride (TTC) is a lipid soluble light sensitive complex, which is commonly used to detect the viability of seeds and the ischemic infarction of mammalian tissues. It is the proton receptor of pyridyl-nucleoside structural enzyme system in respiratory chain, which can react with dehydrogenase in normal tissues and show red color. The dehydrogenase in the living cells of the viable seed embryo tissue can reduce TTC to insoluble red stable triphenylmethane (TTF). If the embryo dies or the viability of the embryo declines, it cannot be stained or stained shallowly. Therefore, the viability of seeds can be determined according to the location and depth of staining.

### **Protocols**(for reference only)

- 1. According to the experimental design, make the tissue model and slice.
- 2. Dyeing: soak the tissue or slice in TTC Solution, 2% and put it into a constant temperature box at 30-37 °C for 15min-30min..(see note 2)
- 3. After dyeing, wash with water and fix in formalin or polyformaldehyde if needed for storage.
- 4. Observe the staining result and photograph.

### Result

Normal tissues	Red
Cerebral infarction area	Not colored

### Note

- 1. TTC Solution, 2% can not be reused if it turns red.
- 2. The section should be absolutely immersed in TTC Solution, 2% when staining. If using a well plate for staining, it is recommended to place the well plate on a shaker and slowly shake for staining to prevent the brain slice from sticking to the bottom of the plate and affecting penetration. Generally, a 1-2mm brain slice requires 1-2mL of staining solution. If multiple brain slices need to be stained simultaneously, it is recommended to increase the amount of staining solution appropriately according to the sample size to ensure full penetration of staining.
- 3. Immediately observe after staining with TTC Solution, 2% and the section can not be placed for a long time.
- 4. For your safety and health, please wear experimental clothes and disposable gloves.





