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# 8%组织细胞固定液

货号: P1112

**规格:** 100mL/500mL

**保存:** -20℃保存, 有效期 1 年。

## 产品介绍:

固定的目的在于保存细胞和组织的原有形态结构,固定剂能阻止内源性溶酶体酶对自身组织和细胞的 自溶、抑制细菌和霉菌的生长。固定剂通过凝固、生成添加化合物等使蛋白质内部结构发生改变,从而使 酶失活。固定剂对细胞核细胞外成分发生物理改变。固定液主要分为醛类固定液、汞类固定液、醇类固定 液、氧化剂类固定液、苦味酸盐类固定液等,较为常用的是醛类中的福尔马林、醇类中的乙醇。

8%组织细胞固定液为磷酸盐缓冲的,水性等渗交联型固定液,pH 值约为 7.4,该固定液适合于绝大 多数组织和细胞的固定。多用于组织灌注快速固定,亦可作为储备液搭配其他固定成分组成复配固定液。

## 操作步骤: (仅供参考)

- 1、组织固定:室温或2-8℃浸泡固定4-12h,大标本适当延长固定时间。用缓冲液漂洗后即可脱水然后包埋用于组织切片。
- 2、 切片固定: 室温或2-8℃固定10min-2h, 视切片厚度而定, 用缓冲液漂洗后即可用于染色。
- 3、细胞固定:室温或2-8℃固定10-30min,用缓冲液漂洗后即可用于染色。

### 注意事项:

- 1、8%组织细胞固定液有一定刺激性和腐蚀性,请在通风较好的环境下小心操作,避免吸入。
  - 2、长期(间隔1个月以上)不用,如用于电镜样本固定须-20℃保存,如用于常规冰冻或石蜡切片样本固定建议放置阴凉避光处保存。
  - 3、组织取材的厚度不同,固定时间也不同。常规活检组织比较适合的厚度为2-4mm,一般不超过6mm。 对组织恰当的选材有利于固定液的渗透。
  - 4、固定液的容量应足够,一般固定液与组织块的体积比率应大于10:1。如果容积不够大,可以在固定期间更换1-3次固定液。
  - 5、温度对固定的影响很明显,提高温度可以加速固定作用,但温度不宜过高。
  - 6、取出新鲜组织后,应及时固定,无法及时固定时,应保存于生理盐水中及时送检。
  - 7、 为了您的安全和健康, 请穿实验服并戴一次性手套操作。



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# Paraformaldehyde, 8%

Cat: P1112

Size: 100mL/500mL

**Storage:** -20°C, valid for 1 year.

#### Introduction

The purpose of fixation is to preserve the original morphological structure of cells and tissues. The fixative can prevent the autolysis of endogenous lysosomal enzymes to their own tissues and cells and inhibit the growth of bacteria and molds. The internal structure of the protein is changed by coagulating and adding compounds, so that the enzyme is inactivated. The fixative changed the extracellular components of nucleus. The fixative is mainly divided into aldehyde fixative, mercury fixative, alcohol fixative, oxidant fixative, picric acid salt fixative and so on. Formalin in aldehydes and ethanol in alcohols are more commonly used.

The Paraformaldehyde, 8% is a phosphate buffered, aqueous isotonic cross-linked fixative with a pH value of approximately 7.4. This fixative is suitable for the fixation of the vast majority of tissues and cells. It is commonly used for rapid fixation of tissue perfusion, and can also be used as a reserve solution in combination with other fixed components to form a composite fixed solution.

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

- 1. For tissue: Soak and fix at room temperature or 2-8 °C for 4-12 h, and extend the fixation time appropriately for large specimens. After rinsing with buffer, it can be dehydrated and then embedded for tissue sectioning.
- 2. For Slice: Fix at room temperature or 2-8 °C for 10 min to 2 h, depending on the thickness of the slice. After rinsing with buffer solution, it can be used for staining.
- 3. For Cell: Fix at room temperature or 2-8 °C for 10-30 min, rinse with buffer, and then use for staining.

#### Note

- 1. Neutral Buffered Formalin, 10% is irritant and corrosive. Please operate in a well ventilated environment to avoid inhalation.
- 2. If it is not used for a long time (interval of more than 1 month). For electron microscopy sample fixation, it should be stored at -20 °C. For routine freezing or paraffin section sample fixation, it is recommended to store in a cool and dark place.
- 3. The thickness and fixation time of tissue samples are different. The suitable thickness of conventional biopsy tissue is 2-4mm, generally no more than 6mm. Proper material selection for the tissue is beneficial to the permeation of the fixative.
- 4. The volume of fixative should be enough, generally the volume radio of fixative and tissue mass should be more than 10:1. If the volume is not large enough, can replace the fixative 1-3 times during the fixation.
- 5. The effect of temperature on fixation is obvious. Increasing the temperature can accelerate the fixation, but the temperature should not be too high.
- 6. After fresh tissue is taken out, it should be fixed in time. If it can not be fixed in time, it should be stored in normal saline for timely inspection.
- For your safety and health, please wear experimental clothes and disposable gloves.

