蔗糖-PBS 溶液(10%)

货号：G2462
规格：10×500mL
保存：2-8℃保存, 有效期 1 个月。

产品介绍：

PBS 是磷酸缓冲盐溶液的简称，是最常用的磷酸盐缓冲溶液之一，不含钙镁的 PBS 又称 Dulbecco's 磷酸缓冲盐溶液、Dulbecco's PBS、D-PBSA、CMF-DPBS、D-PBS、DPBS，主要由氯化钠、氯化钾、磷酸氢二钠、磷酸二氢钾组成，不含 Ca^{2+}、Mg^{2+}，pH 值为 7.4，常用于细胞培养过程中细胞的洗涤或其他常规用途。蔗糖具有脱水的作用，常作为脱水剂。

蔗糖-PBS 溶液(10%)主要由蔗糖和 PBS 组成，新鲜组织取材后，用该溶液沉淀以去除多余水分，以避免冷冻后产生冰晶。

自备材料：

G2161-10%中性福尔马林或 P1110-4%组织细胞固定液

操作步骤：(*仅供参考*)

1、 新鲜组织取材，用充分 PBS 清洗数次，进行组织固定。（见注意事项 1）
2、 置于 10-20 倍体积的蔗糖-PBS 溶液(10%)中 4℃脱水，每 12h-24h 更换一次蔗糖溶液，待组织完全沉底后取出。
3、 根据实验要求进行后续包埋等操作。

注意事项：

1、 组织固定：
小样本（厚度小于 5mm）或分离的胚胎建议用 4℃预冷的 G2161-10%中性福尔马林或 P1110-4%组织细胞固定液固定 1h 后，PBS 稍洗。
大样本（厚度在 5-20mm）建议 4℃固定至少 8h，PBS 稍洗。
特大样本（厚度超过 20mm）建议使用固定液进行灌流，原位固定后取出，PBS 稍洗。
2、 蔗糖溶液容易污染，应注意无菌操作，避免被微生物污染。亦可直接使用G2130系列蔗糖-PFA溶液产品。
3、 可与G2460-蔗糖-PBS溶液(30%)，G2461-蔗糖-PBS溶液(20%)联合使用保护组织结构的前提下充分脱水，操作步骤为在浓度由低到高的蔗糖PBS溶液中依次浸至完全沉底。
4、 为了您的安全和健康，请穿实验服并戴一次性手套操作。

Sucrose-PBS Solution, 10%

Cat: G2462
Size:10×500mL
Storage:2-8℃, valid for 1 month.

Introduction

Phosphate-Buffered Saline is shorten as PBS, which is one of the most commonly used phosphate buffer solutions. PBS without calcium and magnesium is also called Dulbecco's phosphate buffer solution, Dulbecco's PBS, D-PBSA, CMF-DPBS, D-PBS or DPBS. It is mainly composed of sodium chloride, potassium chloride, disodium hydrogen phosphate and potassium dihydrogen phosphate. It does not contain Ca^{2+}, Mg^{2+}, and its pH value is 7.4. It is commonly used to wash cell in the process of cell culturing or other routine use of cells. Sucrose has the function of dehydration and is often used as dehydrating agent.

Sucrose-PBS Solution, 10% is mainly composed of sucrose and PBS. After taking out fresh tissue, the solution is used to precipitate to remove excess water to avoid ice crystals after freezing.

Self Provided Materials

G2161-Neutral Buffered Formalin, 10% or P1110-Paraformaldehyde Fixative, 4%

Protocol(*for reference only*)

1. Pick up fresh tissue and clean several times with absolute PBS, then fix immediately.(See Note 1)
2. Place the tissue in 10-20 times volume of Sucrose-PBS Solution, 10% and dehydrated at 4 ℃. The sucrose solution was replaced every 12-24 h. After the tissue completely sank, it was removed.
3. According to the experimental requirements for subsequent embedding and other operations.

Note

1. Fixation of tissues of different sizes:
   For small samples (less than 5mm in thickness) or isolated embryos should be fixed with G2161-Neutral Buffered Formalin, 10% or P1110-Paraformaldehyde Fixative, 4% for 1 h, and then washed with PBS.
   For large samples (5-20 mm in thickness), it is recommended to fix them at 4 ℃ for at least 8 h and wash them with PBS.
   For extra large samples (more than 20 mm thick), it is recommended to use fixative for perfusion. After in-situ fixation, take out the samples and wash them with PBS.
2. Sucrose solution is easy to be polluted. Pay attention to aseptic operation to avoid microbial contamination.
3. It can be combined with G2460-Sucrose-PBS Solution ,30% and G2461-Sucrose-PBS Solution,20% to fully dehydrate under the premise of protecting tissue structure. The operation steps are as follows: immerse in sucrose PBS solution from low concentration to high concentration in turn until it completely sinks to the bottom.
4. For your safety and health, please wear experimental clothes and disposable gloves.