希夫试剂

货号： G1286
规格： 50mL /100mL/500mL
保存： 2-8℃，避光保存，有效期 6 个月。

产品介绍：

希夫试剂（Schiff Reagent），常与高碘酸（也称过碘酸）配合使用，即 PAS 染色法（Periodic Acid-Schiff stain），主要用来检测组织中的糖原或其他多糖物质。高碘酸是一种氧化剂，能将多糖分子中相邻的二醇基氧化成二醛基，醛基能与希夫试剂反应生成红色不溶性复合物。

操作步骤：（*仅供参考*）

1. 常规固定，常采用 10%的福尔马林，常规脱水包埋。
2. 石蜡切片脱蜡入蒸馏水；冰冻切片直接入蒸馏水。 自来水冲洗 2-3min，再用蒸馏水浸洗 2 次。
3. 置于氧化剂中，室温放置 5-8min，一般不宜超过 10min。 自来水冲洗 1 次，再用蒸馏水浸洗 2 次。
4. 样本放入希夫染色液，置于室温阴暗处，浸染 10-20min。 自来水冲洗 10min。
5. 使用复染液染色（推荐苏木素染色液）。
6. 逐级常规乙醇脱水。 二甲苯透明，中性树胶封固。

染色结果：

糖原与糖蛋白	红色或紫红色
细胞核	复染色
细胞质	深浅不一的红色

备注：颜色深浅很大程度上取决于样品在氧化剂溶液和 希夫染色液中作用时间的长短。

阴性对照(*可选*)：

1. 取淀粉酶 1g 溶解于 PBS(pH5.3) 100mL，处理 30-60min，与其他切片共同入氧化剂。结果应为阴性。
2. (备选方案)取唾液（过滤后用）处理切片 30-60min，与其他切片共同入氧化剂。 结果应为阴性。

注意事项：

1. 为了您的安全和健康，请穿实验服并戴一次性手套操作。
2. 试剂均应低温保存，临用前半小时取出恢复室温。
3. 高碘酸处理温度以不高于 20℃为宜，室温高时，处理时间可适当缩短。希夫染液染色时间可随温度调整，室温高可减少染色时间，冬季室温低，可延长至 20min 左右。
4. 第一次使用本试剂时建议先取 1-2 个样品做预实验。

相关产品：

G1010　姬姆萨染色液（工作液）
G1040　瑞氏染色液
G1120　苏木素伊红(HE)染色试剂盒
G1080　Mayer 苏木素染色液(免疫组化)
G1260　饱和油红 O 染色液

Schiff Reagent

Cat:G1286
Size:50 mL/100mL/500mL
Storage:2-8℃, avoid light, valid for 6 months.

Introduction

Schiff reagent is often used with periodic acid, the method is called PAS Stain(Periodic Acid-Schiff Stain) and mainly used to detect glycogen or other polysaccharide substances in tissues. Periodic acid is a kind of oxidant, which can oxidize the adjacent diol groups in the polysaccharide molecule to dialdehyde groups. The aldehyde groups can react with Schiff Reagent to form red insoluble complex.

Protocol (*for reference only*)

1. Fix sections in 10% formalin fixative. Conventionally dehydration and embedding.
2. For paraffin section, dewax to distilled water; For frozen section, restore room temperature.
3. Rinse in tap water for 2-3min, and then wash with distilled water twice.
4. Place in Oxidant for 5-8min at RT, generally not more than 10min.Wash with distilled water twice.
5. Dye with Schiff Reagent in a dark place at RT, and stain for 10-20min. Rinse in tap water for 10min.
6. Stain with Mayer Hematoxylin Solution for 1-2min.
7. Differentiate by Acidic Differentiation Solution for 2-5s. Wash with tap water for 10-15 min to blue.
8. Conventional dehydration by series of ethanol. Transparent by xylene and seal with resinene.

Result

PAS Reaction Positive Substance	Red or Purplish Red
Nucleus	Blue
Cytoplasm	Red in different degrees

Note: the color depth depends on the time that the sample has been in the Oxidant and Schiff Reagent.

Negative Control(optional)

1. Take 1g of amylase and dissolve it in 100ml of PBS (pH5.3), treat it for 30-60 min, and add into Oxidant together with other sections. The result should be negative.
2. (alternative) take the saliva slice (after filtration) and treat it for 30-60 min, then add into Oxidant together with other slices. The result should be negative.

Note

1. For your safety and health, please wear experimental clothes and disposable gloves.
2. Reagents should be stored at low temperature and restore room temperature before use.
3. The incubation temperature of periodate acid should not be higher than 20 ℃. When the room temperature is high, shorten the incubation time appropriately. The optimal dyeing temperature of Schiff Reagent is 37℃, adjusting incubation time with low or high temperature.
4. It is recommended to take 1-2 samples for preliminary experiment before formal experiment .

Related Products

G1010 Giemsa Stain Solution(Working Suit)
G1040 Wright Stain Solution
G1120 Hematoxylin-Eosin (HE) Stain Kit
G1080 Mayer's Hematoxylin Stain Solution, For IHC
G1260 Oil Red O Saturated Solution, 0.5%