

## 糖原 PAS 染色液(真菌专用)

货号: G1366

规格: 3×20mL /3×50mL

保存: 2-8℃, 避光保存, 有效期 6 个月。

### 产品组成:

名称	3×20mL	3×50mL	保存
试剂(A): 氧化剂	20mL	50mL	2-8℃, 避光
试剂(B): Schiff 染色液	20mL	50mL	2-8℃, 避光
试剂(C): 亚硫酸钠溶液	20mL	50mL	室温, 避光

### 产品介绍:

糖原染色是病理学中常规的染色方法之一, McManus 在 1946 年最先使用高碘酸-雪夫技术显示黏蛋白, 该法常用来显示糖原和其他多糖, 该技术不仅能显示糖原, 还能显示中性黏液性物质和某些酸性物质以及软骨、垂体、霉菌、真菌、色素、淀粉样物质、基底膜等。氧化剂能氧化糖类及有关物质中的 1, 2-乙二醇基, 使之变为二醛, 醛与 Schiff 试剂能结合成一种品红化合物, 产生紫红色。由于氧化剂还可氧化细胞内其他物质, 使用时应注意选择好氧化剂的浓度和氧化时间, 使氧化控制在既能把乙二醇基氧化成醛基又不至于过氧化, 这是很关键的步骤。

糖原 PAS 染色液(真菌专用)利用真菌含有多糖, 氧化剂氧化真菌壁上的多糖而暴露出醛基, 醛基与无色 Schiff 结合呈现红色。该染色法性能稳定, 特异性强; 操作简捷, 仅需 0.5h; 浓度低氧化剂更适用于对真菌染色, 无盐酸乙醇分化液分化步骤。

### 自备材料:

10%中性福尔马林固定液, 蒸馏水, 系列乙醇

### 操作步骤: (仅供参考)

1. 常规固定(常采用10%福尔马林), 常规脱水包埋。
2. 细胞涂片入蒸馏水(无需包埋、脱蜡)或组织切片脱蜡入蒸馏水。
3. 入氧化剂, 室温氧化5-8min。自来水冲洗2次, 蒸馏水浸洗2次。
4. 入Schiff染色液并加盖, 置于室温阴暗处浸染10-20min。
5. 用亚硫酸钠溶液滴洗2次, 每次1min。
6. 流水冲洗 5min (以镜下观察为主)。
7. 逐级常规乙醇脱水。二甲苯透明, 中性树脂胶封固。

### 染色结果:

真菌	紫红色
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和 Schiff 染色液中作用时间的长短。	

### 阴性对照(可选):

1. 滴加G1284- $\alpha$ -淀粉酶水溶液2mL, 37℃处理60min, 入氧化剂进行后续实验。结果应为阴性。
2. (备选方案)取唾液片(过滤后用)处理30~60min, 与其他样本共同入氧化剂。结果应为阴性。

### 注意事项:

1. 氧化剂氧化时间不宜过久, 氧化时的温度以18~22℃最佳。
2. 氧化剂、Schiff 染色液使用时避免接触过多的阳光和空气, 使用前最好提前30min取出恢复至室温, 避光暗处使用。
3. 氧化剂和Schiff 染色液中作用时间非常重要, 该依据切片厚薄、细胞或组织的类别等决定。
4. 如常规切片建议用糖原PAS染色液, 因为其氧化剂浓度相对较高。
5. 为了您的安全和健康, 请穿实验服并戴一次性手套操作。

## Glycogen Periodic Acid Schiff (PAS) Stain Kit (For Fungus)

**Cat:** G1366

**Size:** 3×20mL /3×50mL

**Storage:** 2-8℃, avoid light, valid for 6 months.

### Kit Components

Reagent	3×20mL	3×50mL	Storage
Reagent(A): Oxidant	20mL	50mL	2-8℃, avoid light
Reagent(B): Schiff Reagent	20mL	50mL	2-8℃, avoid light
Reagent(C): Sodium Sulfite Solution	20mL	50mL	RT, avoid light

### Introduction

Glycogen Staining is one of the routine staining methods in pathology. It is often used to display glycogen and other polysaccharides, neutral mucous substances and some acidic substances, cartilage, pituitary, fungi, pigments, amyloid substances, basement membrane and so on.

The dyeing principle of Glycogen Periodic Acid Schiff (PAS) Stain Kit (For Fungus) is that oxidant oxidizes polysaccharides on fungi wall and exposes aldehyde groups, then aldehyde groups combine with Schiff Reagent and show red color. This kit has stable performance and strong specificity, simple operation, only for 0.5 h, low concentration oxidant is more suitable for fungal staining, no hydrochloric acid ethanol differentiation solution differentiation steps.

### Self Provided Materials

10% Neutral formalin, Distilled water, Series of ethanol

### Protocol (for reference only)

1. Conventional fixation (usually 10% formalin), dehydration and embedding.
2. Drop the cell smear into distilled water (without embedding or dewaxing) or dewax the tissue section in distilled water.
3. Oxidize in Oxidant at room temperature for 5-8mins.
4. Rinse with tap water twice and soak with distilled water twice.
5. Add Schiff Reagent and cover the slice. Place it in dark place at room temperature for 10-20mins.
6. Drip with Sodium Sulfite Solution twice for 2mins each time.
7. Rinse with running water for 5mins.(according to the microscopic observation)
8. Dehydrate with series of ethanol, transparent by xylene and seal with resinene.

### Result

Fungus	Purplish Red
Cytoplasm	Red in different degrees

### Negative Control (Optional)

1. Drop 2mL G1284-Diastase Solution, 1%, pH5.3, Water Solvent and treat 37℃ for 60mins, then oxidize with other samples. The result should be negative.
2. (Alternative) Treat saliva tablets (filtered and used) for 30-60mins, then oxidize with other samples. The result should be negative.

### Note

1. The oxidation time should not be too long. The optimum temperature for oxidation is 18-22℃.
2. Avoid excessive exposure to sunlight and air when using Oxidant and Schiff Reagent. It is better to remove and restore to room temperature 30mins before use and use in dark places.
3. The action time of Oxidant and Schiff Reagent is very important, which depends on the thickness of section, the type of cell or tissue, etc.
4. For routine sections, Glycogen PAS Staining Solution is recommended because of its relatively high concentration of Oxidant and Mayer Hematoxylin Staining Solution.
5. For your safety and health, please wear experimental clothes and disposable gloves.