

## 肥大细胞染色试剂盒(醛品红-橙黄 G 法)

货号: G3674

规格: 4×50mL

保存: 2-8°C, 避光保存, 有效期 3 个月。

### 产品组成:

名称	4×50mL	保存
试剂(A): Weigert 碘液	50mL	室温, 避光
试剂(B): Weigert 分化液	100mL	室温
试剂(C): 醛品红染色液	50mL	2-8°C, 避光
试剂(D): 橙黄 G 染色液	50mL	室温, 避光

### 产品介绍:

肥大细胞(Mast cell)是疏松结缔组织内常见的细胞, 常成群的沿着小血管和淋巴管分布, 也常见于支气管和胰腺的小叶间导管周围, 一般细胞较大, 直径约为 20-30 $\mu$ m, 呈圆形或椭圆形, 胞核较小、胞质内充满粗大且具有异染性嗜酸性颗粒。

肥大细胞染色试剂盒(醛品红-橙黄 G 法)能够显示异染性颗粒, 染色后肥大细胞颗粒被染成深紫色, 其他细胞多不着色, 背景呈橙黄色, 对比较为鲜明。

### 操作步骤: (仅供参考)

1. 取新鲜组织用 10%中性福尔马林固定液固定, 常规脱水包埋, 切片厚度 4-5 $\mu$ m, 常规脱蜡至水。
2. 入 Weigert 碘液, 室温孵育 20-30min, 稍微水洗。
3. Weigert 分化液分化 5min, 流水冲洗, 70%乙醇稍洗。
4. 入醛品红染色液, 加盖浸染 (时间见注意事项 3)。
5. 用 70%乙醇洗去多余染色液, 稍微水洗。
6. 用橙黄 G 染色液滴染 1-2min, 稍微水洗。
7. 95%乙醇和无水乙醇迅速脱水, 二甲苯透明, 中性树胶封固。

### 染色结果:

肥大细胞颗粒	紫色或深紫色
弹力纤维	紫色
红细胞	橙黄色
其余组织	淡黄色

### 注意事项:

1. 肥大细胞染色时, 应注意组织要新鲜, 取出后立即固定。
2. 如无 10%中性福尔马林固定液, 可用含 4%甲醛的生理盐水代替。
3. 醛品红不同染色时间亦显示其他物质: 胰岛的 $\beta$ 细胞 (15-30 分钟); 垂体的 $\beta$ 细胞 (30-120 分钟); 肥大细胞颗粒 (5-10 分钟)。
4. 橙黄 G 染色应注意控制染色程度, 避免过染, 否则会掩盖紫色颗粒。
5. 分色后应快速入 95%乙醇、无水乙醇、二甲苯的时间不宜过久, 否则容易导致褪色。
6. 为了您的安全和健康, 请穿实验服并戴一次性手套操作。

## Mast Cells Stain Kit(Aldehyde Fuchsin-Orange G Method)

**Cat:** G3674

**Size:** 4×50mL

**Storage:**2-8°C, avoid light, valid for 3 months.

### Kit Components

Reagent	4×50mL	Storage
Reagent(A):Weigert Iodine Solution	50mL	RT, avoid light
Reagent(B): Weigert Differentiation	100mL	RT
Reagent(C): Aldehyde-Fuchsin Solution	50mL	2-8°C, avoid light
Reagent(D): Orange G Solution	50mL	RT, avoid light

### Introduction

Mast cells are common cells in loose connective tissue. They are often distributed in groups along small blood vessels and lymphatics. They are also common around interlobular ducts of bronchi and pancreas. Generally, mast cells are large, with a diameter of about 20-30  $\mu\text{m}$ , round or oval. Their nucleus are small, and their cytoplasm is filled with thick and heterochromatic eosinophils.

Mast Cells Stain Kit(Aldehyde Fuchsin-Orange G Method) can show heterochromatic granules. After staining, mast cell granules are dyed deep purple, and other cells are not stained, and the background is orange yellow, which is relatively distinct.

### Protocol(for reference only)

1. Fix the fresh tissue immediately in 10% NBF,conventional dehydration and embedding, cut into 4-5 $\mu\text{m}$  thick sections, and dewax to water.
2. Incubate with Weigert Iodine Solution at RT for 20-30mins,rinse with distilled water for few seconds.
3. Differentiate with Weigert Differentiation for 5mins, rinse with distilled water,wash with 70% ethanol.
4. Dye with Aldehyde-Fuchsin Solution capped.(See note 3 for actual time)
5. Wash away excess dye by 70% ethanol,rinse with distilled water.
6. Re-dye with Orange G for 1-2mins,rinse with distilled water.
7. Dehydrate with 95% ethanol and absolute ethanol rapidly,transparent with xylene and seal with resinene.

### Result

Mast Cell Granuels	Purple or Deep Purple
Elastic Fiber	Purple
Red Blood Cell	Orange yellow
Background	Canary yellow

### Note

1. For mast cells staining, the tissue should be fresh and fixed immediately after removal.
2. If there is no 10% NBF, it can be replaced by normal saline containing 4% FA.
3. Aldehydes-Fuchsin also showe other substances in different staining time:  $\beta$  cells of islets of Langerhans (15-30mins);  $\beta$  cells of pituitary (30-120mins); mast cell granules (5-10mins).
4. Orange G staining should pay attention to control the degree of staining to avoid over staining, otherwise it will cover up the purple particles.
5. After differentiation, the time of dehydration and transparent should be not for a long time, otherwise it is easy to cause fading.
6. For your safety and health, please wear experimental clothes and disposable gloves.