

弹力纤维染色试剂盒(改良 Gomori 醛品红法)

货号: G1593

规格: 4×50mL

保存: 2-8℃, 避光保存, 有效期 3 个月。

产品组成:

名称		4×50mL	保存
试剂(A): 酸性氧化液	A1: 氧化液	25mL	2-8℃, 避光
	A2: 酸化液	25mL	2-8℃
临用前, 按 A1:A2=1:1 混合即为酸性氧化液, 不宜提前配制。			
试剂(B): 酸性漂白液		50mL	室温
试剂(C): 醛品红染色液		50mL	2-8℃, 避光
试剂(D): 橙黄 G 染色液		50mL	室温, 避光

产品介绍:

弹力纤维(Elastic Fiber)主要分布于人体的动脉壁、肺泡壁、皮肤, 新鲜时呈黄色, 折光性强。常用的弹力纤维染色法有 Gomori 醛品红法、间苯二酚碱性品红法、地衣红法、维多利亚蓝法、铁碘苏木素法等。弹力纤维染色试剂盒(改良 Gomori 醛品红法)染色原理在于成熟的醛品红对特殊的蛋白质及含有硫酸根的黏多糖具有很强的亲和力, 与弹力纤维结合的很好, 该染液亦显示肥大细胞颗粒, 脂褐素、嗜酸性细胞等。

操作步骤: (仅供参考)

1. 固定于 10%中性福尔马林, 常规脱水包埋。
2. 石蜡切片厚度 4μl, 常规脱蜡至水。
3. 切片入配制好的酸性氧化液内 5min。自来水稍洗。
4. 用酸性漂白液漂白 5min。自来水冲洗 5min。
5. 70%乙醇稍洗。
6. 入醛品红染色液加盖浸染 10min。
7. 入 70%乙醇浸洗 2 次, 至切片无紫色液体脱出为止。自来水稍洗。
8. 橙黄 G 染色液滴染 2-3s。自来水稍洗 1-2min。
9. 95%乙醇和无水乙醇脱水, 二甲苯透明, 中性树胶封固。

染色结果:

弹力纤维	紫色至深紫色
肥大细胞颗粒、粘液物质	紫色至深紫色
背景	不同程度的黄色

注意事项:

1. 该法可显示弹力纤维、前弹力纤维、耐酸纤维, 但需要切片稍厚一些, 以 7μm 为宜。
2. 氧化液和酸化液不宜提前混合, 最好即配即用。
3. 醛品红染色时, 应加盖, 防止溶液挥发。
4. 醛品红染色液保存过久以后, 染色力会下降, 染色时应增加染色时间。
5. 当染胰岛β细胞时, 时间控制在 30min; 当染脑垂体的嗜碱性细胞时, 时间控制在 60min。
6. 橙黄 G 染色应淡染, 否则会掩盖弹力纤维的颜色。
7. 为了您的安全和健康, 请穿实验服并戴一次性手套操作。

Elastic Fiber Stain Kit(Aldehyde-Fuchsin Method)

Cat: G1593

Size: 4×50mL

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

Kit Components

Reagent		4×50mL	Storage
Reagent(A): Acid Oxidizing Solution	A1: Oxidizing Solution	25mL	2-8°C, avoid light
	A2: Acidizing fluid	25mL	2-8°C
Mix reagent A1, A2 in ratio 1:1 to form Acid Oxidizing Solution before use. Please use it in time.			
Reagent(B): Acid Bleach Solution		50mL	RT
Reagent(C): Aldehyde-Fuchsin Solution		50mL	2-8°C, avoid light
Reagent(D): Orange G Solution		50mL	RT, avoid light

Introduction

In a narrow sense, connective tissue contains three types of fibers: collagen fibers, reticular fibers, elastic fibers. Elastic fibers are found in the lungs, arteries, veins. It is highly refractive, elasticize usually thinner than collagen fibers. Elastic fibers stain well with Gomori aldehyde fuchsin, orcein, resorcin- fuchsin , and Weigert's elastic stain in histological sections.

The dyeing principle of Elastic Fiber Stain Kit(Aldehyde-Fuchsin Method) is that mature fuchsin aldehyde has a strong affinity for special proteins such as elastic fibers and mucopolysaccharides containing sulfate. The dye solution can be used to display elastic fibers, mast cell particles, lipofuscin, eosinophils, etc.

Protocol(for reference only)

1. Fix in 10% neutral formalin fixative, and routinely dehydrate and embed.
2. Cut the paraffin embedded tissue into 4μm thin sections and routine dewax to water.
3. Rinse the section with Acid Oxidizing Solution just prepared for 5mins. Wash with tap water for 1-2mins.
4. Bleaching with Acid Bleach Solution for 5mins。 Wash with tap water for 5 mins.
5. Rinse with 70% alcohol.
6. Stain the section in Aldehyde-Fuchsin Solution with cap for 10mins.
7. Rinse with 70% alcohol twice till no purple liquid comes out. Wash with tap water for 1-2mins.
8. Stain with Orange G Solution for 2-3s. Wash with tap water for 1-2mins.
9. Dehydrate with 95% alcohol and absolute alcohol, transparent with xylene and seal.

Result

Elastic Fiber	Purple to dark purple
Mast cell granules and mucus	Purple to dark purple
background	Different degrees of yellow

Note

1. This method can display elastic fiber, anterior elastic fiber and acid resistant fiber, but it needs to slice slightly thicker, 7μm is the best.
2. The oxidizing solution and acidifying solution should not be mixed in advance, and it is better to use them immediately.
3. When aldehyde fuchsin is dyed, it should be capped to prevent the solution from volatilizing.
4. When the Aldehyde-Fuchsin Stain Solution is stored for a long time, the dyeing power will decrease, and the dyeing time should be increased.
5. When islet beta-cells were stained, the time should be controlled at 30 min; when pituitary basophils were stained, the time is controlled at 60 min.
6. Orange G dyeing should be light, otherwise it will cover up the color of elastic fiber.
7. For your safety and health, please wear experimental clothes and disposable gloves.