

纤维素染色试剂盒(改良 MSB 法)

货号: G2040

规格: 9×50mL

保存: 2-8°C, 避光保存, 有效期6个月。

产品组成:

名称	9×50mL	保存
试剂(A):海波溶液	50mL	室温
试剂(B):天青石蓝染色液	50mL	2-8°C, 避光
试剂(C): Mayer苏木素染色液	50mL	2-8°C, 避光
试剂(D):酸性分化液	50mL	室温
试剂(E):马休黄染色液	50mL	室温, 避光
试剂(F):酸性红染色液	50mL	室温, 避光
试剂(G):磷钨酸溶液	50mL	室温, 避光
试剂(H):苯胺蓝染色液	50mL	室温, 避光
试剂(I):弱酸溶液	50mL	室温

产品介绍:

病理的内源性沉着物是色素沉着物的一部分, 组织细胞经过一定的病理变化, 形成不同形状特点的沉着物质, 这种特殊蛋白聚合物经染色后能够显示出纤维素蛋白。纤维素是存在于血液内的纤维蛋白分子聚合形成的特殊蛋白质, 又称为纤维蛋白, 在正常的情况下它是血液内的纤维蛋白原分子聚合而形成的一种特殊蛋白质, 这种蛋白以弯曲细丝纤维素的形式存在于组织内, 大多数呈网状结构, 有时会呈粗大的纤维素网, 陈旧的可凝集呈无定型的块状。当组织受损时, 血管内皮受到了较为严重的损害, 血管通透性随之升高, 则可导致大量纤维蛋白的漏出。

纤维素染色试剂盒(改良MSB法)在经典MSB法基础上进行改良, 以马休黄-酸性红-苯胺蓝为核心, 主要由天青石蓝染色液、Mayer苏木素染色液、马休黄染色液、酸性红染色液、苯胺蓝染色液等共同组成, 是一种简便、廉价的纤维素染色试剂盒, 染色后纤维素呈红色或蓝色。

操作步骤: (仅供参考)

1. 常规石蜡切片, 常规脱蜡至水。海波溶液滴染或浸染处理3-5min, 蒸馏水洗去多余溶液。
2. 天青石蓝染色液滴染或浸染3-5min, 蒸馏水洗1min。Mayer苏木素染色液滴染或浸染3-5min, 蒸馏水洗1min。
3. 酸性分化液分化数秒, 自来水冲洗返蓝10min。蒸馏水洗1-2min。
4. 马休黄染色液滴染或浸染2-3min, 蒸馏水速洗5-10s。
5. 酸性红染色液滴染或浸染10min, 蒸馏水速洗5-10s。
6. 磷钨酸溶液处理切片, 直至胶原纤维红色消失, 蒸馏水速洗3-5s。 (见注意事项1)
7. 苯胺蓝染色液滴染或浸染3-5min或更长时间。弱酸溶液洗去多余染液。 (见注意事项2)
8. 95%乙醇快速脱水3-5s。无水乙醇脱水2次, 每次5-10s。二甲苯透明2次, 每次1-2min, 中性树脂封固。

染色结果:

纤维素	红色(新鲜纤维素可呈黄色, 陈旧性纤维素可呈蓝色)
细胞核	蓝色-灰色
红细胞	黄色
胶原纤维	蓝色

注意事项:

1. 磷钨酸处理切片一般需要5-10min, 至少大于5min才能出现选择性。
2. 苯胺蓝染色一般5min即可, 但应每隔2min观察一次, 防止过染, 否则蓝色过深。
3. 为了您的安全和健康, 请穿实验服并戴一次性手套操作。





Fibrin Stain Kit (Modified MSB Method)

Cat: G2040

Size: 9×50mL

Storage: 2-8°C, avoid light, valid for 6 months.

Kit Components

Reagent	9×50mL	Storage
Reagent (A): Hypo Solution	50mL	RT
Reagent (B): Celestite Blue Solution	50mL	2-8°C, avoid light
Reagent (C): Mayer Hematoxylin Solution	50mL	2-8°C, avoid light
Reagent (D): Acid Differentiation Solution	50mL	RT
Reagent (E): Mathew Yellow Solution	50mL	RT, avoid light
Reagent (F): Acid Red Solution	50mL	RT, avoid light
Reagent (G): Phosphotungstic Acid Solution	50mL	RT, avoid light
Reagent (H): Aniline Blue Solution	50mL	RT, avoid light
Reagent (I): Weak Acid Solution	50mL	RT

Introduction

The pathological endogenous precipitate is a part of pigment precipitate. After certain pathological changes, the tissue cells form the precipitate in different shapes and characteristics. This special protein polymer can show cellulose protein after dyeing. Cellulose is a special protein formed by the aggregation of fibrin molecules in the blood, also known as fibrin. Under normal circumstances, this kind of protein exists in the tissue in the form of curved filamentous cellulose, most of which are in the form of network structure, sometimes in the form of thick cellulose network, and old agglutinable in the form of amorphous block. When the tissue is damaged, the vascular endothelium is seriously damaged, and the vascular permeability increases accordingly, which can lead to the leakage of a large number of fibrin.

This kit improved based on the classic MSB method, which takes Mathew Yellow Solution, Acid Red Solution and Aniline Blue Solution as the core, which is composed of Celestite Blue Solution, Mayer Hematoxylin Solution, Mathew Yellow Solution and Aniline Blue Solution. It is a simple and cheap dyeing solution. After dyeing, the color of cellulose is red or blue.

Protocol (for reference only)

1. Conventionally cut paraffin section and conventionally dewax.
2. Treat in Hypo Solution for 3-5mins, wash with distilled water to remove excess solution.
3. Stain in Celestite Blue Solution for 3-5mins. Wash with distilled water for 1min.
4. Stain in Mayer Hematoxylin Solution for 3-5mins. Wash with distilled water for 1min.
5. Differentiate by Acid Differentiation Solution for several seconds, then rinse with tap water for 10mins.
6. Stain in Mathew Yellow Solution for 2-3mins and quickly wash with distilled water for 5-10s.
7. Stain in Acid Red Solution for 10mins and quickly wash with distilled water for 5-10s.
8. Treat the section with Phosphotungstic Acid Solution until the collagen red disappears, and quickly wash with distilled water for 3-5s.
9. Stain in Aniline Blue Solution for 3-5mins or more. Slightly wash with Weak Acid Solution.
10. Quickly dehydrate by 95% ethanol for 3-5s, absolute ethanol twice and each for 5-10s.
11. Transparent by xylene twice and each for 1-2mins. Seal with resinene.

Result

Cellulose	Red (Fresh cellulose can be yellow, old cellulose can be blue)
Nucleus	Blue-Gray
Erythrocyte	Yellow
Collagen Fiber	Blue

Note

1. Phosphotungstic Acid Solution treatment generally takes 5-10mins, at least more than 5mins to produce.
2. Aniline Blue Solution staining is usually for 5mins, but it should be observed every 2mins to prevent over staining, otherwise the blue is too deep.
3. For your safety and health, please wear experimental clothes and disposable gloves.

