

淀粉样物质染色试剂盒(Puchtler 碱性刚果红法)

货号: G1533

规格: 4×50mL

保存: 室温, 避光保存, 有效期 3 个月。

产品组成:

名称	4×50mL	保存
试剂 A: 苏木素染色液	50mL	室温, 避光
试剂 B: 酸性分化液	50mL	室温
试剂 C: 氯化钠溶液	50mL	室温
试剂 D: 刚果红染色液	50mL	室温, 避光
试剂 E: Puchtler 碱化液	1mL	室温

产品介绍:

淀粉样物质是一种无固定形状的细胞外嗜酸性物质, 可存在于不同的组织、器官, 导致的疾病称为淀粉样变。淀粉样物质主要是由蛋白质构成, 该蛋白大部分排列成反向的 β 折叠层结构。目前研究发现传统的甲紫染色法灵敏度低、特异性差, 经典的而且有效的方法是刚果红染色, 1922 年 Bennhold 发现了刚果红可以用于活体内淀粉样物质的鉴别, 并应用到组织切片。

淀粉样物质染色试剂盒(Puchtler 碱性刚果红法)主要由刚果红染色液、苏木素染色液等组成。其染色原理在于淀粉样物质对刚果红比其他的组织结构具有更大的亲和力, 其羟基与刚果红的氨基结合, 从而使淀粉样物质染成红色。

操作步骤: (仅供参考)

1. 常规固定, 脱水包埋。切片厚度 4 μ m, 常规脱蜡至水。
2. 滴加苏木素染色液室温染色 5min。蒸馏水洗去多余染液。
3. (可选) 酸性分化液分化 2-5s, 立即入水终止分化。
4. 滴加 Scott 蓝化液返蓝 3-5min 或自来水洗返蓝 10min。蒸馏水洗 1min。
5. 按氯化钠溶液: Puchtler 碱化液=100:1 的比例配制碱性氯化钠溶液, 即配即用。切片入碱性氯化钠溶液浸染 15-20min。
6. 按刚果红染色液: Puchtler 碱化液=100:1 的比例配制碱性刚果红染色液, 即配即用。切片直接入碱性刚果红染色液浸染 20-30min。
7. 无水乙醇快速轻轻冲洗 2-3 次。二甲苯透明, 中性树胶封固。

染色结果:

淀粉样物质	粉红色或红色
细胞核	蓝色

注意事项:

1. 切片脱蜡应尽量干净, 否则影响染色效果。
2. 酸性分化液应密闭保存, 一旦开启尽快用完。
3. 刚果红染色液易挥发, 染色时尽量采用浸染。
4. 碱性氯化钠溶液和碱性刚果红染色液即配即用。
5. 为了您的安全和健康, 请穿实验服并戴一次性手套操作。

相关产品:

- G1534 淀粉样物质染色试剂盒 (改良 Highman 刚果红法)
- G1530 淀粉样物质染色试剂盒 (Bennhold 刚果红法)
- G1535 淀粉样物质染色试剂盒(Highman 刚果红法)
- G1532 淀粉样物质染色试剂盒 (改良 Stores 刚果红法)





Congo Red Amyloid Stain Kit(Puchtler Method)

Cat: G1533

Size: 4×50mL

Storage: RT, avoid light, valid for 3 months.

Kit Components

Reagent	4×50mL	Storage
Reagent A: Hematoxylin Staining Solution	50mL	RT, avoid light
Reagent B: Acid Differentiation Solution	50mL	RT
Reagent C: Sodium Chloride Solution	50mL	RT
Reagent D: Congo Red Staining Solution	50mL	RT, avoid light
Reagent E: Puchtler Alkalization Solution	1mL	RT

Introduction

Amyloid is a kind of extracellular acidophilic substance with no fixed shape, which can exist in different tissues and organs, resulting in diseases called amyloidosis. Amyloid is mainly composed of proteins, most of which are arranged in reverse β - fold structure. Under the electron microscope, the amyloid materials are arranged as fibrils. In the case materials, there are a large number of non branching filaments, most of which are randomly arranged. The histological methods for the identification of amyloid substances include Violet Staining, Congo Red Staining and polarized light microscopy. In 1922, Bennhold found that Congo red can be used to identify starch like substances in vivo, and applied to tissue sections.

Congo Red Amyloid Stain Kit (Puchtler Method) is mainly composed of Congo Red Staining Solution and Hematoxylin Staining Solution. The dyeing principle is that the amyloid has a greater affinity for Congo Red than other tissue structures, and its hydroxyl group combines with the amino group of Congo Red, so that the amyloid is dyed red.

Protocols(for reference only)

1. Conventionally fix , dehydrate and embed. Cut the section in 4 μ m thick, conventionally dewax to distilled water.
2. Add Hematoxylin Staining Solution and stain for 5mins. Rinse with distilled water to remove excess dye.
3. (Optional)Differentiate by Acid Differentiation Solution for 2-5s, then immediately remove to distilled water to stop differentiation.
4. Drip Scott blue solution and return to blue for 3-5mins, or wash with tap water and return to blue for 10mins. Wash with distilled water for 1 minute.
5. Prepare basic Sodium Chloride Solution as the 100:1 ratio of Sodium Chloride Solution:Puchtler Alkalization Solution. It is ready to use. Soak the section in basic Sodium Chloride Solution for 15-20mins.
6. Prepare basic Congo Red Staining Solution as the 100:1 ratio of Congo Red Staining Solution:Puchtler Alkalization Solution. It is ready to use. Soak the section in basic Congo Red Staining Solution for 20-30 mins.
7. Slightly wash with absolute alcohol for 2-3 times. Transparent by xylene and seal with resinene.

Result

Amyloid	Pink Red or Red
Nucleus	Blue

Note

1. Section dewaxing should be as clean as possible, otherwise it will affect the dyeing effect.
2. The Acid Differentiation Solution shall be kept in a closed state and used up as soon as open.
3. Congo red staining solution is prone to volatilization, so immersion dyeing should be used as much as possible during dyeing.
4. Basic Sodium Chloride Solution and basic Congo Red Staining Solution are ready to use.
5. For your safety and health, please wear experimental clothes and disposable gloves.

Related Products

G1534 Congo Red Amyloid Stain Kit(Modified Highman Method)

G1530 Congo Red Amyloid Stain Kit, Bennhold

G1535 Congo Red Amyloid Stain Kit(Highman Method)

G1532 Congo Red Amyloid Stain Kit(Modified Stores Method)

