淀粉样物质染色试剂盒（Bennhold 刚果红法）

货号：G1530
规格：5×50mL
保存：室温，避光，有效期 1 年。

产品组成：

名称	5×50mL	保存
试剂 A：Bennhold 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：Scott 蓝化液	50mL	室温
试剂 D：刚果红染色液	50mL	室温，避光
试剂 E：Bennhold 分化液	50mL	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。在电子显微镜下淀粉样物质呈原纤维排列，病例材料中为大量细胞外的不分支的细丝，大多随机排列。用于识别淀粉样物质的组织学方法有甲紫染色、刚果红染色、偏振光显微镜观察等。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(Bennhold 刚果红法)主要由刚果红染色液、苏木素染色液等组成。该染色法性能稳定，是非常经典的淀粉样物质染色的方法。

操作步骤：(*仅供参考*)

1. 常规固定，脱水包埋。
2. 切片厚度 4μm，常规脱蜡复水。
3. 入 Bennhold 苏木素，浸染 5min。酸性分化液分化 2-5s，立即入水终止分化。
4. 蒸馏水冲洗 2min。入 Scott 蓝化液返蓝。自来水冲洗 2min。
5. 入刚果红染色液，浸染 30min。
6. Bennhold 分化液迅速分化。自来水冲洗 1-2min。
7. 逐级常规乙醇脱水。二甲苯透明，中性树胶封固。

染色结果：

淀粉样物质	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. 刚果红染色液染色时尽量采用浸染，如果滴染，应置于湿盒防止溶液挥发。
4. Bennhold 分化液分化步骤很重要，应随时注意分化程度，至无多余染料流下为止。分化时间较短，胶原纤维会被染成红色；分化过度，淀粉样物质会被脱色。如果脱色过度，可以将切片清洗后重新用刚果红染色液浸染。
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）
G1533 淀粉样物质染色试剂盒（Puchtler 碱性刚果红法）
G1532 淀粉样物质染色试剂盒（改良 Stores 刚果红法）

Congo Red Amyloid Stain Kit (Bennhold Method)

Cat: G1530
Size: 5×50mL
Storage: RT, avoid light, valid for 1year.

Kit Components

Reagent	5×50mL	Storage
ReagentA:Bennhold Hematoxylin Staining Solution	50mL	RT, avoid light
Reagent B:Acid Alcohol Differentiation Solution	50mL	RT
Reagent C:Scott Bluing Solution	50mL	RT
Reagent D:Congo Red Staining Solution	50mL	RT, avoid light
Reagent E:Bennhold Differentiation Solution	50mL	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 Ki (Bennhold Method) is mainly composed of Congo Red Staining Solution and Bennhold Hematoxylin Staining Solution. The dyeing method has stable performance and is a very classical method for dyeing amyloid.

Protocols(*for reference only*)

1. Conventionally fix , dehydrate and embed.
2. Cut the section in 4μm thick, conventionally dewax to distilled water.
3. Soak the section in Bennhold Hematoxylin Staining Solution for 5mins.
4. Differentiate by Acid Alcohol Differentiation Solution for 2-5s, then immediately remove to distilled water to stop differentiation. Wash with tap water for 2mins.
5. Blue in Scott Bluing Solution. Wash with tap water for 2mins.
6. Soak the section in Congo Red Staining Solution for 30mins.
7. Quickly differentiate by Bennhold Differentiation Solution. Wash with tap water for 1-2mins.
8. Dehydrate by series of alcohol, transparent by xylene, then seal with resinene.

Result

Amyloid	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. Soak dyeing shall be used as much as possible when dyeing with Congo Red Staining Solution. If use drop staining, shall place in a wet box to prevent the solution from volatilizing.
4. The differentiation process of Bennhold Differentiation Solution is very important. Pay attention to the degree of differentiation until there is no excess dye flowing down. When the differentiation time is short, the collagen fiber is also dyed red; when the differentiation is excessive, the amyloid is also decolorized. If the decolorization is excessive, can clean the section and then soak with Congo Red Staining Solution again.
5. For your safety and health, please wear experimental clothes and disposable gloves.

Related Products

G1534 Congo Red Amyloid Stain Kit(Modified Highman Method)
G1533 Congo Red Amyloid Stain Kit(Puchtler Method)
G1532 Congo Red Amyloid Stain Kit(Modified Stores Method)