

淀粉样物质染色试剂盒(甲紫法)

货号: G1536

规格: 2×50mL

保存: 室温, 避光保存, 有效期 6 个月。

产品组成:

名称	2×50mL	保存
试剂(A): 甲基紫染色液	50mL	室温, 避光
试剂(B): 酸性分化液	50mL	室温

产品说明:

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, 后来经过Highman改良, 染色效果更好。

淀粉样物质染色试剂盒(甲紫法)主要由甲紫染色液、酸性分化液组成, 是经Jurgens改良的一种异染色液, 其染色原理是蛋白物质中的酸性黏多糖与甲紫起异色反应。其优点是简便省时, 其缺点是染色后的切片难以保存。

自备材料:

10%中性福尔马林固定液、甘油明胶

操作步骤: (仅供参考)

1. 常规固定, 常采用 10%中性福尔马林, 常规脱水包埋, 切片厚度 4 μ m, 常规脱蜡至水。
2. 入甲基紫染色液 3min, 无需水洗, 滴加酸性分化液分化, 直至无染色液脱出。
3. 稍水洗, 甘油明胶封固。

染色结果:

淀粉样物质	红色至紫红色
细胞核、细胞质、结缔组织	蓝色至深浅不一的紫蓝色

注意事项:

1. 切片脱蜡应尽量干净, 否则影响染色效果。
2. 尽量采用浸染, 如果滴染, 应置于湿盒防止溶液挥发。
3. 酸性分化液应密闭保存, 分化步骤很重要。
4. 染片不能经乙醇脱水, 否则易出现无法上色的问题。
5. 粘液物质甲紫染色时也会呈异染颗粒性红色, 应注意鉴别。
6. 在镜下观察异染性反应时, 应注意把蓝色滤光片移去。
7. 为了您的安全和健康, 请穿实验服并戴一次性手套操作。

Amyloid Stain Kit (Methyl Violet Method)

Cat: G1536

Size: 2×50mL

Storage: RT, avoid light, valid for 6 months.

Kit components

Reagent	2×50mL	Storage
Reagent(A): Methyl Violet Staining Solution	50mL	RT, avoid light
Reagent(B): Acid Differentiation Solution	50mL	RT

Introduction

Amyloid is a kind of extracellular eosinophilic substance without fixed shape, which can exist in different tissues and organs, resulting in a disease called amyloidosis. Amyloid is mainly composed of proteins, most of which are arranged in reverse β -Folding layer structure. Under the electron microscope, amyloid was arranged as fibrils. In the case materials, there were a large number of extracellular non branched filaments, mostly arranged randomly. Histological methods used to identify amyloid include nail violet staining, Congo red staining, polarized light microscope observation and so on. At present, it is found that the traditional nail violet staining method has low sensitivity and poor specificity. The classic and effective method is Congo red staining. In 1922, bennold found that Congo red can be used for the identification of amyloid in vivo and applied to tissue sections. Later, it was improved by highman.

Amyloid Stain Kit (Methyl Violet Method) is mainly composed of Methyl Violet Staining Solution and Acid Differentiation Solution. It is a heterostaining solution improved by Jurgens. Its dyeing principle is that the acid mucopolysaccharide in protein like substance reacts with nail violet. Its advantage is simple and time-saving, but its disadvantage is that the stained sections are difficult to preserve.

Self Provided Materials

10% neutral formalin fixative, glycerol gelatin

Protocols(for reference only)

1. Conventional fixation with 10% neutral formalin fixative, dehydration and embedding. Cut slice into thickness of 4 μ m. Dewax to water.
2. Add Methyl Violet Staining Solution and stain for 3min without water washing, and add Acid Differentiation Solution dropwise until no staining solution comes out.
3. Wash slightly with water and seal with glycerol gelatin.

Result

Amyloid	Red to Purplish Red
Nucleus, cytoplasm and connective tissue	Blue to Purple Blue of varying shades

Note

1. The section dewaxing shall be as clean as possible, otherwise the dyeing effect will be affected.
2. Dip dyeing shall be adopted as far as possible. In case of drip dyeing, place in a wet box to prevent the solution from volatilizing.
3. Acid Differentiation Solution should be sealed and preserved, and the differentiation step is very important.
4. The section cannot be dehydrated by ethanol, otherwise the color is easy to fade.
5. Mucus material will also show metachromatic granular red when stained with Methyl Violet Staining Solution, which should be identified.
6. When observing metachromatic reaction under a microscope, pay attention to remove the blue filter piece.
7. For your safety and health, please wear experimental clothes and disposable gloves.