

牢固蓝染色液

货号: G3242

规格: 50mL

保存: 室温, 避光保存, 有效期 1 年。

产品介绍:

髓鞘 (myelin sheath) 是包裹在神经细胞轴突外面的一层膜, 即髓鞘由髓鞘细胞和细胞膜组成, 是神经细胞的质膜沿着轴索的轴心螺旋缠绕形成的多层脂双层结构, 髓鞘上有郎飞氏结, 可使神经冲动跳跃传递。髓鞘染色在病理诊断中有一定意义, 髓鞘的病理变化分为早期、中期和晚期。在早期着色较深; 病变中期阶段的髓鞘变性形成脂滴, 可用脂质染色加以显示, 后期彻底溃变并被吞噬细胞清除, 故不再有髓鞘的阳性结果。

很多疾病都可以引起髓鞘的变化, 牢固蓝髓鞘染色可以显示病理情况下髓鞘是否完整、变性、坏死程度及修复情况, 对神经组织的病理诊断和研究均有意义, 例如神经纤维受损时, 髓鞘可出现膨胀、曲折成球形、断裂或脱鞘完全消失等改变。

操作步骤: (仅供参考)

1. 石蜡切片 5~8 μ m, 脱蜡至 95%乙醇;
2. 入牢固蓝染色液, 室温染色 12~20h;
3. 入 95%乙醇洗去多余染色液, 蒸馏水冲洗;
4. 入牢固蓝分化液 (G1840) 分色 15s;
5. 入 70%乙醇分色 30s 至灰白质清晰;
6. 蒸馏水冲洗。(如果分色不足, 可重复 6~7 步骤);
7. 入伊红染色液, 复染 1~5min, 水洗;
8. 常规脱水、二甲苯透明、中性树胶封片。

染色结果:

髓鞘	蓝色
细胞质	红色

注意事项:

1. 分化这一步很关键, 应严格控制分化时间, 可在镜下观察分化程度。
2. 固定液以 10%的福尔马林为佳。
3. 切片不宜太厚, 应控制在 8~9 μ m 以内, 否则易出现脱片或过染等现象。
4. 为了您的安全和健康, 请穿戴实验服并戴一次性手套操作。

Luxol Fast Blue Stain Solution

Cat: G3242

Size: 50mL

Storage: RT, avoid light, valid for 1 year.

Introduction

Myelin sheath is a layer of membrane wrapped outside the axons of nerve cells, that is, myelin sheath is composed of myelin cells and cell membrane. It is a multilayer lipid double-layer structure formed by the plasma membrane of nerve cells spirally winding along the axis of axon. There is Langfei's node on the myelin sheath, which can make the nerve impulse and jump to transmit. Myelin staining has certain significance in pathological diagnosis. The pathological changes of myelin sheath can be divided into early, middle and late stages. In the early stage of the lesion, the color is deep. In the middle stage, the myelin degenerated into lipid droplets, which can be displayed by lipid staining. In the late stage, the myelin sheath degenerated completely and is cleared by phagocytes, so there is no positive result of myelin sheath.

Many diseases can cause the change of myelin sheath. Luxol Fast Blue Myelin Staining can show whether the myelin sheath is complete, denatured, necrotic and repaired under pathological conditions. It has significance for the pathological diagnosis and research of nerve tissue. For example, when the nerve fiber is damaged, the myelin sheath can appear expansion, zigzag into a sphere, break or completely disappear without sheath.

Protocols(for reference only)

1. Cut paraffin section in 5-8 μ m, then dewax to 95% ethanol.
2. Soak in Luxol Fast Blue Stain Solution and stain at room temperature for 12-20h.
3. Wash the excess dye solution with 95% ethanol. Rinse in distilled water.
4. Differentiate by Luxol Differentiation Solution(G1840) for 15s.
5. Differentiate in 70% ethanol for 30s till the gray white matter is clear.
6. Rinse in distilled water(if the color differentiation is insufficient, can repeat steps 6 and 7).
7. Re-dyeing with Eosin Staining Solution for 1-5min, wash with water.
8. Dehydrate in 95% and 100% ethanol, transparent by xylene and seal with resinene.

Result

Myelin Sheath	Blue Green
Cytoplasm	Red

Note

1. Differentiation is a key step. The differentiation time should be strictly controlled, and the degree of differentiation can be observed under the microscope.
2. It is better to use 10% formalin as fixative.
3. The section should not be too thick, and should be controlled within 8-9 μ m, otherwise, it is easy to take off the section or over dye.
4. For your safety and health, please wear experimental clothes and disposable gloves.