

髓鞘染色试剂盒(牢固蓝-焦油紫法)

(C)

V02

货号: G3245 规格: 3×50mL

保存:室温,避光保存,有效期1年。

产品组成:

| 名称 | 3×50mL | 保存 |
|--------------|--------|--------|
| 试剂(A):牢固蓝染色液 | 50mL | 室温, 避光 |
| 试剂(B):牢固蓝分化液 | 50mL | 室温 |
| 试剂(C):焦油紫染色液 | 50mL | 室温, 避光 |

产品介绍:

髓鞘(myelin sheath)是有髓神经纤维轴索外部包裹的管状外膜,主要由髓磷脂构成,髓鞘上有郎飞氏结,可使神经冲动跳跃传导。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,不再有阳性结果。

髓鞘染色试剂盒(牢固蓝-焦油紫法)可以显示病理情况下髓鞘是否完整、变性、坏死及修复情况,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、扭曲成球形、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 5~8μm, 脱蜡至 95%乙醇。
- 2. 切片入牢固蓝染色液浸染,室温过夜染色(石蜡切片建议 12~18h,冰冻切片染色时间不超过 16h)。 (见注意事项 4)
- 3. 95%乙醇洗去多余染色液,蒸馏水冲洗。
- 4. 滴加牢固蓝分化液分色 3-5s, 倾去分化液。(见注意事项 5)
- (可选)滴加 70%乙醇分色 10-20s 至灰白质清晰。
- 6. 蒸馏水冲洗。(如果分色不足,可重复 4-5 步骤)。
- 7. 滴加焦油紫染色液复染 30~40s,蒸馏水洗。
- 8. 立刻用 95%、100%乙醇快速脱水,二甲苯透明,中性树胶封片。

染色结果:

| 髓鞘 | 蓝色 |
|-----|--------|
| 神经元 | 粉红色—紫色 |

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,石蜡切片应控制在 $3\sim7\mu m$ 以内,冰冻切片应控制在 $10\sim20\mu m$,否则易出现脱片或过染等现象。
- 4. 如室温染色效果不佳,可在 56℃下染色 2h。
- 5. 若牢固蓝分化液分色太强,可以用蒸馏水稀释 2-3 倍后使用,同时注意分化时间。
- 6. 为了您的安全和健康,请穿实验服并戴一次性手套操作。



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Luxol Fast Blue Myelin Stain Kit(Cresyl Violet Method)

Cat: G3245 **Size:** 3×50mL

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

Kit Components

| Reagent | 3×50mL | Storage |
|---|--------|-----------------|
| Reagent(A): LFB Staining Solution | 50mL | RT, avoid light |
| Reagent(B): LFB Differentiation Solution | 50mL | RT |
| Reagent(C): Cresyl Violet Staining Solution | 50mL | RT, avoid light |

Introduction

Myelin sheath (myelin sheath) is a myelinated nerve fiber axon externally wrapped tubular outer membrane, mainly composed of myelin, myelin sheath has Langfeld's junction, which allows nerve impulses to jump conduction. 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. In the late stage, the myelin sheath degenerated completely and is cleared by phagocytes, so there is no positive result.

Luxol Fast Blue Myelin Stain Kit 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.

Protocols(*for reference only*)

- 1. Cut into paraffin section in 5-8µm thick, then dewax to 95% ethanol.
- 2. Sections were immersed into LFB Staining Solution and stained overnight at room temperature (paraffin sections are recommended for 12-18h, frozen sections were stained for no more than 16h).(See Note 4)
- 3. Wash the excess dye solution in 95% ethanol, rinse in distilled water.
- 4. Decolorize with LFB Differentiation Solution for 3-5s, and pour off the differentiation solution.
- 5. (optional)Decolorize with 70% ethanol for 30s until the gray and white matter was clear.
- 6. Rinse in distilled water(if the color differentiation is insufficient, can repeat steps 4 and 5).
- 7. Re-dyeing with Cresyl Violet Staining Solution for 30-40s, wash with distilled water.
- 8. Immediately dehydrated rapidly with 95% and 100% ethanol, transparent by xylene clear and seal with resinene.

Result

| Myelin Sheath | Blue |
|---------------|--------------------|
| Neuron | Pink Red to Purple |

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 slices should not be too thick, paraffin sections should be controlled within 3-7μm, frozen sections should be controlled within 10-20μm, otherwise it is easy to appear phenomena such as dehiscence or overstaining.
- 4. If the dyeing effect at room temperature is not good, can stain at 56 °C for 2h.
- 5. If the color separation of the LFB Differentiation Solution is too strong, it can be diluted 2-3 times with distilled water before use, while paying attention to the differentiation time.
- 6. For your safety and health, please wear experimental clothes and disposable gloves.



