V02

髓鞘染色试剂盒(变色酸 2R 法)

货号：G3247
规格：4×50mL
保存：室温，避光保存，有效期 1 年。

产品组成：

名称	4×50mL	保存
试剂(A):固定液	100mL	室温，避光
试剂(B):变色酸 2R 染色液	50mL	室温，避光
试剂(C): 2R 分化液	50mL	室温
试剂(D):亮绿染色液	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。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。

髓鞘染色试剂盒(变色酸 2R 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，髓鞘呈深红色，脱髓鞘纤维不着色。

操作步骤：(*仅供参考*)

组织固定：采用本试剂盒中固定液或者甲醛钙固定液固定样本。

1. 石蜡切片脱蜡至水。
2. 切片滴加变色酸 2R 染色液染色 10～15min。
3. 取适量的 2R 分化液，按 2R 分化液：蒸馏水=1：3 的比例配制 2R 分化工作液。切片用 2R 分化工作液洗 2～3 次。
4. 滴加亮绿染色液复染 10min。
5. 自来水稍洗。
6. 常规梯度乙醇脱水，二甲苯透明，中性树胶封固。

染色结果：

髓鞘	深红色，横截面呈环状，纵截面呈鱼骨刺状
轴索、间质	绿色
脱髓鞘纤维	不着色，横截面呈半环状或不着色，呈空白区

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. 建议使用本试剂盒提供的固定液，若自备，可使用 10%甲醛钙固定液。
3. 切片不宜太厚，应控制在 5～7μm 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，请穿实验服并戴一次性手套操作。

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Myelin Stain Kit(Chromotrope 2R Method)

Cat: G3247
Size: 4×50mL
Storage: RT, avoid light, valid for 1 year.

Kit Components

Reagent	4×50mL	Storage
Reagent (A):Fixative	100mL	RT, avoid light
Reagent (B):Chromotrope 2R Solution	50mL	RT, avoid light
Reagent (C): 2R Differentiation Solution	50mL	RT
Reagent (D): Light Green 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 can be divided into early, middle and late stages. In the early stage, the color is deep. In the middle stage, the myelin degenerates into lipid droplets, which can be displayed by lipid staining. In the later stage, the myelin degenerates completely and is removed by phagocytes, so there is no positive result of myelin sheath.

Myelin Stain Kit（Chromotrope 2R Method）can show whether the myelin sheath is complete, degenerated and also can show necrotic degree and repair situation under pathological conditions. It has significance for the pathological diagnosis and research of nerve tissue. The myelin sheath is dark red and the demyelinated fiber is not stained.

Protocol*(for reference only)*

Tissue fixation: Fix the samples using the fixative in this kit or calcium formaldehyde fixative.

1. For paraffin section, dewax to water.
2. Sections were stained dropwise with Chromotrope 2R Solution for 10-15 min.
3. Mix 2R Differentiation Solution with distilled water as the radio of 1:3 to form 2R Differentiation Working Solution. Directly wash in2R Differentiation Working Solution for 2-3 time.
4. Drops of Light Green Solution were added to re-stain for 10 min.
5. Slightly wash with tap water.
6. Conventionally dehydrate in series of ethanol and transparent by xylene, seal with resinene.

Result

Myelin Sheath	Dark red, annular in cross section, cord or fishbone in longitudinal section.
Axon, Stroma	Green
Demyelinated Fiber	No color, semi-circular or non color in cross section, show blank area.

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 the fixative provided by this kit for the specimen. If it is self prepared, 10% formaldehyde calcium fixative can be used.
3. The section should not be too thick, and should be controlled within 5-7 μm, otherwise, it is easy to take off the section or over dyeing.
4. For your safety and health, please wear experimental clothes and disposable gloves.