V02

尼氏染色试剂盒（焦油紫法）

货号：G1430
规格：2×100mL
保存：室温，避光保存，有效期 6 个月。

产品组成：

名称	2×100mL	保存
试剂(A):焦油紫染色液	100mL	室温，避光
试剂(B):尼氏分化液	100mL	室温

产品介绍：

尼氏体或称尼氏小体是分布于神经细胞胞质内的三角形或椭圆形小块状物质，能被碱性染料染成紫蓝色。各种神经细胞内都含有尼氏体，但其形状、数量、分布位置常常不同。尼氏体也存在于树突中，但不在于轴突和胞体的轴丘。尼氏体是神经元内蛋白质合成的重要部位，当神经元受到刺激后，胞体内的尼氏体会明显减少。通过焦油紫染色，能够很好地显示尼氏体的变化。本产品操作简便、染色稳定、适用范围广，可以用于石蜡组织切片的尼氏体、神经元等的染色。

操作步骤：(*仅供参考*)

1. 对于石蜡切片：新鲜组织固定于中性福尔马林溶液后，常规脱水包埋，切片厚度建议 5-10um；对于冰冻切片：新鲜组织固定于中性福尔马林溶液后，梯度蔗糖 4℃脱水 24-72h 至组织沉底后，OCT 包埋，切片厚度建议 10-15um。
2. 石蜡切片常规脱蜡至水，冰冻切片浸于蒸馏水中复温 3min。
3. 将切片浸于焦油紫染色液置于 56℃温箱恒温染色 1h，冰冻切片时间可缩短至 15-30min。
4. 蒸馏水冲洗去除多余染液。
5. 滴加尼氏分化液分化切片数秒至 2min，（需在显微镜下观察至背景接近于无色为止）。
6. 无水乙醇迅速脱水。二甲苯透明，中性树胶封固。

染色结果：

尼氏体	紫色
背景	接近于无色或浅蓝色

注意事项：

1. 尼氏体离体后容易溶解，所以组织取出后应立即固定，否则难以着色。
2. 组织固定起着非常重要的作用，固定可采用乙醇、Carnoy 固定液或中性福尔马林溶液。
3. 石蜡切片厚度可能会影响到染色结果，可以根据组织情况适当增加切片厚度。
4. 染色后的标本需尽快拍照，同时染色后切片务必避光保存，否则容易褪色。
5. 染色实验结果和操作熟练程度相关，建议先做预实验摸索最佳条件。

Nissl Stain Kit (Cresyl Violet Method)

Cat: G1430
Size: 2×100mL
Storage: RT, avoid light, valid for 6 months.

Kit Components

Reagent	2×100mL	Storage
Reagent(A): Cresyl Violet Stain	100mL	RT, avoid light
Reagent(B): Nissl Differentiation Solution	100mL	RT

Introduction

Nissl bodies are small triangular or oval shaped substances distributed in the cytoplasm of nerve cells, which can be dyed purple blue by basic dyes. Nissl bodies are found in all kinds of nerve cells, but their shape, number and distribution are often different. Nissl bodies also exist in dendrites, but not in axons and axonal hillocks of cell bodies. Nissl body is an important part of protein synthesis in neurons. When neurons are stimulated, Nissl bodies in neurons will significantly reduce. The change of Nissl body can be well shown by Cresyl Violet Stain. The product is easy to operate, stable in staining and wide in application. It can be used for staining Nissl body and neurons in paraffin sections.

Protocol(*for reference only*)

1. For paraffin section:fix fresh tissue in 10% neutral formalin fixative, then dehydrate and embed, the recommended thickness is 5-10μm; For frozen section:fix fresh tissue in 10% neutral formalin fixative, then dehydrate in series of sucrose for 24-72h and embed in OCT emdeding reagent, the recommended thickness is 10-15μm.
2. For paraffin section: dewax to distilled water. For frozen section: soak the section in distilled water and restore to room temperature.
3. Soak the section into Cresyl Violet Stain and incubate in 56℃ incubator for 1h, the staining time for frozen section can be shortened to 15-30min.
4. Rinse in distilled water to remove excess solution.
5. Differentiate by Nissl Differentiation Solution several seconds to 2 min(view under the microscope, stop the differentiation until the background is close to colorless).
6. Dehydrate quickly in absolute ethanol, transparent by xylene and seal with resinene.

Result

Nissl bodies	Purple
Background	Colorless or Light Blue

Note

1. Nissl body is easy to dissolve in vitro, so the tissue should be fixed immediately after removal, otherwise it is difficult to stain.
2. Tissue fixation plays an important role. Ethanol, Carnoy fixative or neutral formalin can be used for fixation.
3. The thickness of paraffin section may affect the staining result, and the thickness of paraffin section can be increased according to the tissue condition.
4. The stained specimen should be photographed as soon as possible, and the stained section should be kept away from light, otherwise it will fade easily.
5. The result of dyeing experiment is related to the proficiency of operation. It is suggested to do pre experiment to explore the best condition.

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