尼氏染色试剂盒（甲基紫法）

货号： G1432
规格： 2×50mL/2×100mL
保存： 室温，避光保存，有效期 6 个月。

产品组成：

名称	2×50mL	2×100mL	保存
试剂(A):甲基紫染色液	50mL	100mL	室温，避光
试剂(B): 尼氏分化液	50mL	100mL	室温

产品介绍：

神经元细胞体包括一个具有皱褶核膜的大细胞核、稀疏的染色质和一个明显的核仁。在细胞体中，细胞质是尼氏颗粒，即能够代表粗面内质网并在很多神经元中产生特异的斑点状嗜碱性表现的嗜碱性颗粒。尼氏颗粒可以用很多染色来显示，例如中性红、亚甲基蓝、甲苯胺蓝和甲基紫等。染色的变异、pH 和分化的时间使一些染色既可以仅突出尼氏物质，也可以包括神经元的细胞核和神经胶质。尼氏体(Nissl body)是分布于神经细胞胞质内的三角形或椭圆形小块状物质，能被碱性染料如甲基紫、亚甲蓝、甲苯胺蓝和焦油紫等染料染成紫蓝色。

尼氏染色试剂盒(甲基紫法)主要特点：操作简便染色稳定、分化时间短，适用范围广，可以用于石蜡组织切片的尼氏物质/尼氏小体、神经元等。

操作步骤：(*仅供参考*)

1. 固定:乙醇、Carnoy 固定液或中性福尔马林盐溶液。
2. 组织切片:石蜡切片 7~10μm 或 25μm(见注意事项 4)。
3. 切片脱蜡入水。
4. 甲基紫染色液染色 10~20min。
5. 蒸馏水冲洗。
6. 用尼氏分化液分化 4~8s，直到大部分染色被消除。
7. 直接经过无水乙醇至二甲苯，显微镜下观察。
8. 如果有必要，重复步骤 6 和 7，重复时，给予少量尼氏分化液分化。
9. 在二甲苯中充分透明，用中性树脂封片。

染色结果：

尼氏物质或尼氏小体	紫黑蓝色
神经元	淡紫蓝色
细胞核	紫蓝色

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。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。
2. 本染色液对石蜡组织切片尼氏染色效果较好。
3. 如果只要证实尼氏物质，那么染色后必须要用酸性分化液分化。
4. 石蜡切片厚度 7～10μm 或 25μm(皮质神经元密度的评估要用 25μm 厚的切片)。
5. 染色后的标本务必避光保存，否则容易褪色。
6. 为了您的安全和健康，请穿实验服并戴一次性手套操作。

Nissl Stain Kit (Methyl Violet Method)

Cat:G1432
Size:2×50mL/2×100mL
Storage:RT, avoid light, valid for 6 months.

Kit Components

Reagent	2×50mL	2×100mL	Storage
Reagent(A):Methyl Violet Solution	50mL	100mL	RT, avoid light
Reagent(B): Nissl Differentiation	50mL	100mL	RT

Introduction

The neuronal soma consists of a large nucleus with a folded nuclear membrane, a sparse chromatin and a distinct nucleolus. In the cell body, the cytoplasm is Nissl granules, which can represent rough endoplasmic reticulum and produce specific punctate basophilic granules in many neurons. Nissl granules can be shown by many dyes, such as neutral red, methylene blue, toluidine blue and methyl violet. Variation of dyeing, pH and differentiation time make some staining not only highlight Nissl substance, but also include the nucleus and glia cells. Nissl body is a triangular or elliptical block substance distributed in the cytoplasm of nerve cells. It can be dyed purple-blue by methyl violet, methylene blue, toluidine blue and tar violet.

This kit has many charactersitics: simple operation, stable staining, short differentiation time and wide application. It can be used in paraffin tissue sections of Nissl substance/Nissl bodies, neurons and so on.

Protocol(*for reference only*)

1. Fixation: fix in ethanol, Carnoy fixative or neutral formalin salt solution.
2. Tissue section: the thicness of paraffin section is 7-10 or 25μm (see note 4).
3. Dewax paraffin sections and rehydrate in graded alcohol.
4. Stain with Methyl Violet Solution for 10-20min.
5. Rinse with distilled water.
6. Differentiate with Nissl Differentiation for 4-8 s until most of the staining solution is eliminated.
7. Absolute alcohol dehydration, transparentize by xylene, view under the microscope.
8. If necessary, repeat step 6 and 7, and when repeating, add a small amount of Nissl Differentiation .
9. Rinse thoroughly in xylene.
10. Seal with Canadian balm or DPX.

Result

Nissl body	Violet Blue to Violet Black
Neuron	Light Violet Blue
Nucleus	Violet Blue

Note

1. Nissl dissolves easily in vitro, so the tissue should be fixed immediately after removal, otherwise it is difficult to stain. Tissue fixation plays a very important role. Ethanol, Carnoy or neutral formalin solution can be used for fixation.
2. This staining solution has a good effect on Nissl staining of paraffin tissue sections.
3. If only to confime the Nissl substance, it must be differentiated by acid differentiation solution after staining.
4. Paraffin section thickness is 7-10μm or 25μm (cortical neuron density should be assessed with 25μm section).
5. The stained specimens must be kept away from light, otherwise they will fade easily.
6. For your safety and health, please wear experimental clothes and disposable gloves.