V02

尼氏染色试剂盒(亚甲蓝法)

货号：G1434
规格：3×50mL
保存：室温，避光保存，有效期 6 个月。

产品组成：

名称	3×50mL	保存
试剂(A)：亚甲蓝染色液	50mL	室温，避光
试剂(B)：尼氏分化液	50mL	室温
试剂(C)：钼酸铵溶液	50mL	室温

产品介绍：

尼氏体(Nissl body)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，能被碱性染料如硫堇、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(亚甲蓝法)主要优点是操作简便、染色稳定、适用范围广，可以用于石蜡组织切片的尼氏物质、神经元等的染色，尼氏体的存在和消失是神经细胞是否受损的重要指标，当发生脑炎、脑缺血、轴突反应等情况时，尼氏体会发生溶解甚至消失。

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. 亚甲蓝染色液滴染 10min。
4. 尼氏分化液分化 30s-3min，直至在显微镜下观察尼氏体清晰可见。
5. （可选）滴加钼酸铵溶液处理切片 3-5min。（见注意事项 3）
6. 迅速蒸馏水冲洗，防止脱色。
7. 无水乙醇脱水，二甲苯透明，中性树胶封固。

染色结果：

尼氏小体	蓝色
细胞核	浅蓝色
背景	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. 钼酸铵处理是为了增强电子密度，从而增加对比度，若经钼酸铵处理脱色严重或效果不佳，可以选择省略这一步。
4. 本染色试剂盒对石蜡组织切片的尼氏染色效果较好。
5. 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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Nissl Stain Kit (Methylene Blue Method)

Cat: G1434
Size: 3×50mL
Storage: RT, avoid light, valid for 6 months.

Kit Components

Reagent	3×50mL	Storage
Reagent(A): Methylene Blue Stain	50mL	RT, avoid light
Reagent(B): Nissl Differentiation Solution	50mL	RT
Reagent(C): Ammonium Molybdate Solution	50mL	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 Stain Kit (Methylene Blue Method) has the advantages of simple operation, stable staining and wide application. It can be used for staining Nissl substances and neurons in paraffin sections. The presence and disappearance of Nissl body is an important indicator of whether nerve cells are damaged. When encephalitis, cerebral ischemia, axon reaction and other conditions occur, Nissl body will dissolve or even disappear.

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. Drop Methylene Blue Stain and stain for 10min.
4. Differentiate by Nissl Differentiation Solution for 1-3min(view under the microscope , stop differentiation until nissl body is clear).
5. (Optional)Treat in Ammonium Molybdate Solution for 3-5min.(*See Note 3*)
6. Rinse quickly in distilled water to avoiding decolorizing.
7. Dehydrate quickly in absolute ethanol, transparent by xylene and seal with resinene.

Result

Nissl body	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. Ammonium molybdate treatment is used to enhance electron density and increase contrast. If the decolorization is severe or the effect is poor after ammonium molybdate treatment, this step can be omitted.
4. This staining kit has a good effect on Nissl staining of paraffin sections.
5. For your safety and health, please wear experimental clothes and disposable gloves.