

尼氏染色液(硫堇法)

货号: G1438

规格: 100mL

保存: 室温, 避光保存, 有效期 6 个月。

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。

尼氏染色液(硫堇法)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°C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、将切片浸于尼氏染色液(硫堇法)置于 50-60°C温箱染色 30-60min。蒸馏水稍洗去除多余染液。
- 4、95%乙醇迅速分化至背景接近于无色。
- 5、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	紫蓝色
细胞核	淡蓝色
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, 固定可采用乙醇或中性福尔马林溶液。
- 3、本染色试剂盒对石蜡组织切片的尼氏染色效果较好。
- 4、95%乙醇分化应迅速进行, 肉眼观察至切片清晰, 背景呈淡蓝色或无色为适宜。
- 5、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 Solution (Thionin Method)

Cat: G1438

Szie: 100mL

Storage: RT, avoid light, valid for 6 months.

Introduction

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.

Nissl Stain Solution (Thionin Method) has many characteristics: simple operation, stable staining, and wide application. It can be used in paraffin tissue sections of Nissl substance/Nissl bodies, neurons and so on. The existence and disappearance of Nissl is an important indicator of whether nerve cells are damaged. When encephalitis, cerebral ischemia and axonal reaction occur, Nissl 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 5-10 μ m; For frozen section: fix fresh tissue in 10% neutral formalin fixative, then dehydrate in series of sucrose for 24-72h and embed in OCT embedding reagent, the recommended thickness is 10-15 μ m.
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 Nissl Stain Solution (Thionin Method) and incubate at 50-60 $^{\circ}$ C for 30-60min. Slightly wash with distilled water.
4. Differentiate by 95% ethanol rapidly.
5. Absolute ethanol dehydration, transparent by xylene, seal with resinene.

Result

Nissl body	Purple Blue
Nucleus	Light Blue
Background	No Color or Light Blue

Note

1. Nissl dissolves easily in vitro, so the tissue should be fixed immediately after removal, otherwise it is difficult to stain.
2. Tissue fixation plays a very important role. Ethanol or neutral formalin solution can be used for fixation.
3. This staining solution has a good effect on Nissl staining of paraffin tissue sections.
4. Differentiation of 95% ethanol should be carried out rapidly. It is appropriate to observe the slices clearly by naked eye and the background is light blue or colorless.
5. For your safety and health, please wear experimental clothes and disposable gloves.

