

饱和油红 O 染色液

货号: G1260

规格: 100mL/500mL

保存: 2-8℃, 避光保存, 有效期为 1 年。

产品介绍:

油性红 O (Oil Red O) 是一种脂溶性偶氮染料, 是很强的脂溶剂和染脂剂, 能特异性地使组织和细胞内中性甘油三脂、脂质以及脂蛋白等染色。当组织切片置入染液时, 染料则离开染液而溶于组织内的脂质(如脂滴)中, 使组织内的脂滴呈红色。用于分析细胞样品中脂质状况。本产品为饱和油红 O 染色液, 操作简捷, 性能稳定, 着色清晰。

操作步骤: (仅供参考)

1. 工作液配制:

将饱和油红 O 原液和自来水或 1%糊精溶液 (G1265) 按 3:2 混匀, 室温放置沉淀 5-10min, 过滤后使用。(见注意事项 1)

2. 染色程序

- 1) 切片用甲醛-钙固定液固定 10 分钟。
- 2) 蒸馏水充分洗涤, 60%异丙醇浸洗 5-10s。
- 3) 浸入油红 O 染液染色 10-20 分钟。
- 4) 60%异丙醇快速分化 5-10s 至间质清晰, 蒸馏水洗终止分化。
- 5) (可选) Mayer 苏木素滴染 3-5 分钟, 蒸馏水洗, 自来水返蓝 10min。
- 6) 甘油明胶封片, 镜检。

染色结果:

脂滴	橙色到鲜红色
细胞核	蓝色
间质	无色

注意事项:

1. 最好建议使用 1%糊精溶液 (G1265) 配制染色工作液, 较自来水具有胶体性质, 可更好的吸附不溶性物质, 从而过滤后染色结果背景更加干净, 不易有沉淀影响观察。
2. 为了您的安全和健康, 请穿实验服并戴一次性手套操作。
3. 脂滴易溶于有机溶剂, 切片固定建议使用甲醛类水性固定液, 甲醛固定对组织形态保存效果更佳。已经固定充分的组织可以不进行二次固定。
4. 油红 O 染色时应避免试剂挥发过多, 否则易形成背景沉淀。染色时染色液应充分覆盖组织细胞。
5. 60%异丙醇分化, 可在镜下控制至脂肪组织呈鲜红色, 间质无色时为度。建议使用苏木素复染, 增加染色对比度。
6. 第一次使用本试剂时建议先取 1-2 个样品做预实验。





Oil Red O Saturated Solution, 0.5%

Cat: G1260

Size: 100mL/500mL

Storage: 2-8°C, avoid light, valid for 1 year.

Introduction

Oil Red O is a fat soluble azo dye, a strong fat solvent and fat liquor. It can dye the neutral triglycerides, lipids and lipoproteins in tissues and cells specifically. When the tissue section drop into the dye solution, the dye leaves the dye solution and dissolves in the lipid (such as lipid droplets) in the tissue, making the lipid droplets in the tissue red. It is used to analyze the lipid status in cell samples. Oil Red O Saturated Solution, 0.5% has easy operation, stable performance and clear color.

Protocol(for reference only)

1. Preparation of Working Solution

Mix Oil Red O Stock solution and tap water or G1265-Dextrin Aqueous Solution,1% as the ratio of 3:2 to form Oil Red O Working Solution and place in room temperature for 5-10min, then filter it for use.

2. Staining Procedure

- 1) Fix sections in Formaldehyde-Calcium Fixative at room temperature for 10 min.
- 2) Rinse fully in distilled water. Rinse with 60% isopropanol for 5-10s.
- 3) Soak in Oil Red O Working Solution for 10-20 min.
- 4) Differentiate by 60% isopropanol for 5-10s to clear mesenchyme. Rinse with distilled water to stop differentiation.
- 5) (Optional) Re-dyeing with Mayer Hematoxylin Solution for 3-5min. Wash by distilled water. And use tap water return to blue.
- 6) Seal with glycerin gelatin and view under optical microscope.

Result

Lipid Droplets	Orange to bright red
Nucleus	Blue
Mesenchyme	Colorless

Note

1. It is recommended to use a G1265-Dextrin Aqueous Solution,1% to prepare the staining solution, which has colloidal properties compared to tap water and can better adsorb insoluble substances, resulting in a cleaner background after filtration and less precipitation affecting observation.
2. For your safety and health, please wear experimental clothes and disposable gloves.
3. Lipid droplets are dissolved in organic solvents. It is recommended to use formaldehyde water-based fixative, and formaldehyde fixation has a better effect on tissue morphology preservation. Tissues that have been adequately fixed not undergo secondary fixation.
4. Avoid too much volatilization of reagents in Oil Red O staining, otherwise it is easy to form background precipitation. The staining solution should fully cover the tissue cells.
5. The differentiation of 60% isopropanol can be controlled under microscope until the adipose tissue is bright red and the stroma is colorless. It is suggested that re-dyeing with hematoxylin to increase the contrast.
6. When using this reagent for the first time, it is recommended to take 1-2 samples for pre-test.

