

## 苏丹黑 B 染色液

货号: G1690

规格: 2×50mL

保存: 室温, 避光保存, 有效期 6 个月。

### 产品组成:

名称	2×50mL	保存
试剂(A): 苏丹黑 B 染色液	50mL	室温, 避光
试剂(B): 核固红染色液	50mL	室温, 避光

### 产品介绍:

中性脂肪染色经常采用苏丹 II、苏丹 III、苏丹 IV、苏丹黑 B、油红 O 法等。传统方法采用苏丹染料, 最近发现偶氮染料油红 O 更适合脂肪的染色。油红 O 是很强的脂溶剂和染脂剂, 较易与甘油三脂结合呈小脂滴状, 与磷脂结合力稍差。

苏丹黑 B 染色液主要用于显示组织器官的脂肪变性和类脂质的异常沉着, 常发生于肝、肾、心等实质脏器的脂肪变性, 细胞内出现多数中性脂肪滴; 鉴别和诊断脂肪组织中所发生的肿瘤及其性质。标本不采用含有乙醇的固定液(如需要固定可采用 10% 福尔马林)、也不采用石蜡切片, 需用冰冻切片或碳蜡切片。脂肪瘤、脂肪肉瘤、卵泡膜瘤、肾上腺皮质腺瘤等行苏丹黑 B 染色后, 呈阳性反应; 肾透明细胞癌、卵巢纤维瘤等行苏丹黑 B 染色后, 呈阴性反应。

### 自备材料:

载玻片、显微镜、70%乙醇、蒸馏水、甘油明胶

### 操作步骤: (仅供参考)

- 新鲜组织低温切片, 一般 -20℃ 到 -25℃。如样本为脂肪瘤, 应调节至 -30℃。
- 冰冻切片 5-10μm (6-8μm 为佳), 贴于载玻片上。70%乙醇稍微浸洗一下。
- 入苏丹黑 B 染色液, 浸染 1-2min。
- 70%乙醇洗去多余染液。蒸馏水浸洗 1min。
- 入核固红染色液, 淡染细胞核 5-10min。
- (可选)镜下观察如染色过深, 可用酸性分化液分化数秒。
- 自来水稍洗后, 蒸馏水稍洗一下。用滤纸吸去切片及周围的水分, 让其稍微干燥。
- 甘油明胶或阿拉伯糖胶封固。

### 染色结果:

中性脂肪	黑色
磷脂	灰黑色
细胞核	红色

### 注意事项:

- 标本不宜采用含有乙醇的固定液、也不宜用石蜡切片, 需用冰冻切片。
- 苏丹染料容易褪色, 应密闭保存。在染色过程中必须防止染料发生沉淀。故切片入染液时应密封, 勿与流动空气相接触, 避免溶液挥发时发生沉淀。
- 冰冻切片较易着色, 核固红染色液复染时应避免过染。
- 甘油明胶封固的样本, 保存时间不长。如需长期保存, 可在玻片交界的边缘用中性树胶封闭。
- 为了您的安全和健康, 请穿实验服并戴一次性手套操作。

## Sudan Black B Stain Kit

**Cat:** G1690

**Size:** 2×50mL

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

### Kit Components

Reagent	2×50mL	Storage
Reagent (A): Sudan Black B Stain	50mL	RT, avoid light
Reagent (B): Nuclear Fast Red Stain	50mL	RT, avoid light

### Introduction

Neutral fat stains often use Sudan II, Sudan III, Sudan IV, Sudan black B, oil red O and so on. Sudan is often used in traditional methods. Recently, azo dye oil red O is more suitable for dyeing fat. Oil red O is a strong lipid solvent and dye. It is easy to bind to triglycerides in droplet shape, but has a slightly poor binding to phospholipids.

Sudan Black B Stain Kit is mainly used to show fatty degeneration of tissues and organs and abnormal lipid-like sedation. It often occurs in fatty degeneration of liver, kidney, heart and other parenchymal organs that most of the neutral fat droplets appear in cells. It can identify and diagnose tumors and their properties in adipose tissue. The sample should not fixed with ethanol (10% formalin if required) or paraffin. Frozen sections or carbon wax sections were needed. After Sudan Black B staining, lipoma, liposarcoma, follicular membrane tumor and adrenal cortex adenoma show positive reaction, while renal clear cell carcinoma and ovarian fibroma show negative reaction.

### Self Provided Materials

Slide, 70% ethanol, Distilled water, Microscope, Glycerol gelatin.

### Protocol (for reference only)

1. Prepare low-temperature sections of fresh tissue, generally at  $-20^{\circ}\text{C}$  to  $-25^{\circ}\text{C}$ . If the sample is lipoma, it should be adjusted to  $-30^{\circ}\text{C}$ .
2. Slice the frozen section at 5-10  $\mu\text{m}$  (6-8 micron is preferable) and attach to the slide.
3. Soak slightly with 70% ethanol.
4. Stain with Sudan Black B Stain for 1-2mins. Wash with 70% ethanol to remove excess solution.
5. Rinse with distilled water for 1 min.
6. Re-dyeing slightly with Nuclear Fast Red Stain for 5-10mins.
7. (optional) Under the view of microscope, if the staining is too deep, can differentiate by acid ethanol differentiation solution for several seconds.
8. Rinse with tap water and wash with distilled water.
9. Use filter paper to absorb the slices and surrounding water and let them dry slightly.
10. Seal with glycerol gelatin or arabinose gum.

### Result

Neutral fat	Black
Phospholipid	Dark Gray
Nucleus	Red

### Note

1. Samples should not be fixed with ethanol or embedded with paraffin, and frozen sections should be used. It is recommended to use 10% neutral formalin or 10% formaldehyde-calcium solution to fix.
2. Precipitation of dyes must be prevented during dyeing. Therefore, slices should be covered when they are put into dye solution, so as not to contact with flowing air to avoid precipitation when the solution volatilizes.
3. Sudanese dyes fade easily and should be kept in airtight condition.
4. Samples sealed with glycerol gelatin did not last long. If long-term preservation is required, the edge of the boundary between the cover slide and the slide can be sealed with neutral gum.
5. For your safety and health, please wear lab clothes and disposable gloves.