V02

# 苏丹黑 B 染色试剂盒（细胞专用）

**货号：**G1691
**规格：**3×20mL
**保存：**室温，避光保存，有效期 6 个月。

## 产品组成：

| 名称 | | 3×20mL | 保存 |
|---|---|---|---|
| 试剂(A): SBB 固定液 | | 20mL | 室温，避光 |
| 试剂(B):SBB 染色工作液 | B1: SBB 染色液 A | 10mL | 室温，避光 |
| | B2: SBB 染色液 B | 10mL | 室温 |
| 等量混合 B1 和 B2 配制 SBB 染色工作液,现配现用 | | | |
| 试剂(C): 瑞氏染色液 | | 20mL | 室温，避光 |

## 产品介绍：

脂质(Lipid)是中性脂肪、类脂及其衍生物的总称，其共同的物理特性是不溶于水，易溶于有机溶剂(如乙醇、乙醚等)。人体的脂肪主要有两种：1、储存脂肪，如中性脂肪，主要分布于皮下、肾、胰腺等部位。2、结构脂肪，如类脂(磷脂、糖脂、胆固醇等)，主要分布于细胞内。中性脂肪(Neutral fat)是由三分子脂肪酸和一分子甘油组成的脂类，呈中性。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。

苏丹黑 B 染色试剂盒(细胞专用)简称 SBB 染色溶液，其原理是苏丹黑 B 属于脂溶性染料，可溶解于细胞质内的含脂结构中，使脂肪、磷脂、胆固醇等脂类现棕黑或深黑色，并定位于细胞质。神经磷脂、脑磷脂等行苏丹黑 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。

## 操作步骤：(*仅供参考*)

1. 制备新鲜骨髓、血液涂片，晾干后入 SBB 固定液固定 10～15min。
2. 取出涂片，用蒸馏水洗 5-10s 去除固定液后稍晾干。
3. 入新配制好的 SBB 染色工作液，室温(20～25℃)浸染 60min。
4. 70%乙醇洗去多余染液，蒸馏水浸洗 1min。
5. 瑞氏染色液染色 20～30min。
6. 蒸馏水快速洗去多余染液，然后晾干，镜检。

## 染色结果：

| | |
|---|---|
| 中性脂肪 | 棕黑色或深黑色颗粒 |
| 细胞核 | 紫红色 |

粒细胞系除早期原粒细胞阴性外，分化好的原粒细胞在以下阶段随细胞成熟而阳性反应增强，衰老中性粒细胞反应程度减弱，单核细胞系弱阳性，淋巴细胞系为阴性。浆细胞及巨核细胞均为阴性。嗜酸性粒细胞和 Auer 小体呈强阳性反应。

**阴性对照：**取相同样本入乙醚、氯仿、丙酮等量混合液，溶解一般脂肪，然后用预冷丙酮溶解磷脂，再进行 SBB 染色，结果呈阴性反应。

## 注意事项：

1. 标本不宜采用含有乙醇的固定液。
2. 苏丹染料容易褪色，应密闭保存。
3. 应防止染料发生沉淀，可置于血平皿内，两端放置小竹签，血膜向下架空染色。
4. 神经磷脂、脑磷脂 SBB 染色呈阳性，有利于对类脂质沉积病的诊断。
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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# Sudan Black B Stain Kit (for Cells)

**Cat:** G1691
**Size:** 3×20mL
**Storage:** RT, avoid light, valid for 6 months.

## Kit Components

| Reagent | | 3×20mL | Storage |
|---|---|---|---|
| Reagent(A): SBB Fixative | | 20mL | RT, avoid light |
| Reagent(B): SBB Stain | B1: SBB Stain A | 10mL | RT, avoid light |
| | B2: SBB Stain B | 10mL | RT |
| Mix B1and B2in equal amount to prepare SBB Stain, it is ready to use. | | | |
| Reagent(C): Wright Stain | | 20mL | 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 Black B Stain Kit (for Cells) is shortened as SBB Stain. Its principle is that Sudan black B is a kind of fat soluble dye, which can be dissolved in the lipid-containing structure in the cytoplasm, making the fat, phospholipid, cholesterol and other lipids appear brown or dark black, and located in the cytoplasm. After Sudan black B staining, neuro phospholipid and cephalin show positive reaction, while renal clear cell carcinoma and ovarian fibroma show negative reaction.

## Protocol *(for reference only)*

1. Make fresh bone marrow and blood smear and fix them in SBB Fixative for 10-15mins.
2. Take out the smear, wash it with distilled water for 5-10s to remove the fixative solution and dry it slightly.
3. Stain in SBB Stain at room temperature (20-25℃) for 60mins.
4. Wash with 70% ethanol to remove the excess dye solution and soak in distilled water for 1 min.
5. Stain with Wright Stain for 20-30mins.
6. Wash quickly with distilled water to remove excess stain, then air dry and view under the microscope.

## Result

| | |
|---|---|
| Neutral fat | Brownish Black or Dark Black particles |
| Nucleus | Purple Red |

Except for the early stage of neutrophil negative, the positive reaction of the well differentiated granulocytes increase with the cell maturation in the following stages, while that of the senescent neutrophils decrease, monocyte is weakly positive, and lymphocyte is negative. Plasma cells and megakaryocytes are negative. Eosinophils and Auer bodies show strong positive reaction.

**Negative Control:** Take the same sample into the mixture of aether, chloroform and acetone, dissolve the general fat, then dissolve the phospholipid with precooled acetone, and then follow SBB staining. Finally the result is negative.

## Note

1. Samples should not be fixed with ethanol
2. Precipitation of dyes must be prevented during dyeing. It can be placed in a blood platen, with small bamboo sticks at both ends, and the blood film is overhead dyed downward.
3. After staining with SBB , neuro phospholipid and cephalin show positive reaction, which is helpful for the diagnosis of lipoid deposition disease.
4. Sudanese dyes fade easily and should be kept in airtight condition.
5. For your safety and health, please wear lab clothes and disposable gloves.