

## 甲苯胺蓝溶液 (1%)

货号: G3668

规格: 100mL/500mL

保存: 室温, 避光保存, 有效期至少 1 年。

### 产品介绍:

甲苯胺蓝(Toluidine Blue O)是一种常用的人工合成染料,属于醌亚胺染料类,是碱性染料,甲苯胺蓝中的阳离子有染色作用,组织细胞的酸性物质与其中的阳离子相结合而被染色,可染细胞核使之呈蓝色;肥大细胞胞质内含有肝素和组织胺等异性物质遇到甲苯胺蓝可呈异性紫红色,可用于尖锐湿疣的初筛及肥大细胞的检测。

### 操作步骤: (仅供参考)

#### 一、组织切片染色:

1. 石蜡切片入二甲苯2次,每次15min。
2. 系列乙醇各1min。蒸馏水洗2min。
3. 入甲苯胺蓝染色液,浸染10~15min。
4. 蒸馏水洗1min,滤纸吸干水分。
5. 95%乙醇分色至肥大细胞呈紫蓝色,背景呈淡蓝色。(可选)
6. 95%乙醇快速脱水3-5s,无水乙醇2次,每次1min。二甲苯透明,中性树胶封固。

#### 二、细胞涂片染色:

1. 用20%的乙醇溶液稀释甲苯胺蓝染色液,制备细胞染色工作液,一般要求稀释10倍即可。
2. 细胞涂片后,立即放入95%的乙醇中固定3min,取出沥干。
3. 滴加稀释后的细胞染色工作液进行滴染,加盖玻片使染色更均匀,染色2min。
4. 垫一张纸巾,将玻片竖起,稍加压力,使多余染料被纸巾吸去。
5. 无需干燥,直接镜检。

### 染色结果:

|               |     |
|---------------|-----|
| 细胞核、淋巴细胞胞质    | 深蓝色 |
| 肥大细胞颗粒、淋巴细胞核仁 | 紫红色 |
| 细胞质、单核细胞      | 淡蓝色 |

### 注意事项:

1. 第一次使用本试剂时建议先取 1-2 个样品做预实验。
2. 本产品为 1%浓度水溶液,具体使用浓度可自行稀释。
3. 由于温度对染料的溶解度与着色力有很大的影响,若要快速染色,置于 37°C恒温箱染色。
4. 为了您的安全和健康,请穿实验服并戴一次性手套操作。

### 相关产品:

- G3660 甲苯胺蓝染色液(细胞专用)
- G3661 甲苯胺蓝染色液(1%,磷酸盐法)
- G3662 甲苯胺蓝染色液(0.5%,磷酸盐法)
- G3663 甲苯胺蓝染色液(1%,硼酸盐法)
- G3665 甲苯胺蓝染色液(0.5%,硼酸盐法)
- G3670 肥大细胞染色液(甲苯胺蓝法)

## Toluidine Blue O Solution, 1%

Cat: G3668

Size: 100mL/500mL

Storage: RT, avoid light, valid for at least 1 year.

### Introduction

Toluidine blue O is a kind of commonly used synthetic dye, belonging to quinone imine dyes, which is basic dye. The cations in toluidine blue have a dyeing effect. The acidic substances of tissue cells are combined with the cations in them to dye the nucleus to make it blue. The cytoplasm of mast cells contains heparin, histamine and other heterochromatic substances which encounter toluidine blue. It can be used to screen condyloma acuminatum and detect mast cells.

### Protocol (for reference only)

#### For Tissue Slice Staining

1. Add xylene into paraffin section twice, 15min each time.
2. 1 min for each series of ethanol. Wash with distilled water for 2 min.
3. Dye with Mast Cells Stain Solution (Toluidine blue Method) for 10-15mins.
4. Wash with distilled water for 1 min, and drain with filter paper.
5. Differentiate with 95% ethanol till the mast cell is purple-blue and the others are light blue. (optional)
6. Dehydration by 95% ethanol once for 3-5s and absolute ethanol 2 times for 1min each time.
7. Transparent with xylene and seal with resinene.

#### For Cell Smear Staining

1. Dilute Toluidine Blue O Solution with 20% ethanol solution, which is generally required to be diluted to ten times.
2. After smearing the cells, fix them in 95% ethanol for 3min immediately.
3. Dye with dropping diluted Toluidine Blue O Solution, and covering the slide for 2min.
4. Put up the slide and apply a little pressure to make the excess dye be absorbed by the paper towel.
5. No need to dry, direct microscopy.

### Result

|                               |              |
|-------------------------------|--------------|
| Cell Nucleus, Lymphocyte      | Dark Blue    |
| Nucleolus, Mast Cell Granules | Purplish Red |
| Cytoplasmic, Monocyte         | Light Blue   |

### Note

1. When using this reagent for the first time, it is recommended to take 1-2 samples for pre experiment. When there are a large number of samples, a dyeing frame and a dyeing cylinder can be used for easy operation.
2. This product is an aqueous solution of 1% concentration. Dilute into specific concentration by yourself.
3. Because the temperature has a great influence on the solubility and colouring power of dyes, if you want to dye fast, you can increase the temperature properly when the room temperature is low.
4. For your safety and health, please wear experimental clothes and disposable gloves.

### Related Products

- G3660 Toluidine blue staining Solution, For Cell
- G3661 Toluidine Blue O solution, 1% in PBS
- G3662 Toluidine Blue O Solution, 0.5% in PBS
- G3663 Toluidine Blue O Solution, 1% in Sodium Borate
- G3665 Toluidine Blue O Solution, 0.5% in Sodium Borate
- G3670 Mast Cells Stain Solution (Toluidine blue Method)