V02

甲苯胺蓝染色液(细胞专用)

货号：G3660
规格：20mL/50mL
保存：2-8℃，避光保存，有效期1年。

产品介绍：

甲苯胺蓝(Toluidine Blue O)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。甲苯胺蓝还含有两个助色团，能促使染料产生电离成盐类，帮助发色团对组织产生染色力，使切片上的组织细胞着色，可染细胞核使之呈蓝色。临床上，经常用甲苯胺蓝对软骨细胞和肥大细胞进行染色。

甲苯胺蓝染色液(细胞专用)适用于细胞内酸性黏液多糖染色，尤其适用于含硫的酸性黏液物质染色，染色后酸性黏多糖呈紫红色。

操作步骤：(*仅供参考*)

一、细胞涂片：
1. 制备细胞悬液，用PBS清洗2次，取20-50μL加至载玻片上小心涂开，室温或37℃恒温台晾干。
2. 滴加200-400μL甲苯胺蓝染色液(细胞专用)染色5min。（见注意事项2）
3. 滴加等量蒸馏水于涂片上混匀，染色15min。
4. 蒸馏水洗2次，每次30s，甩干或晾干后用中性树胶封片，镜下观察。

二、贴壁细胞：
1. 吸去培养基，PBS清洗两次，每次1min。
2. 每孔加入适量的甲苯胺蓝染色液(细胞专用)染色5min。
3. 加入等量蒸馏水轻轻吹打或轻轻摇晃培养板混匀，静置15min。
4. 蒸馏水洗2两次，每次30s，加入适量蒸馏水完全浸没，镜检。（见注意事项4）

染色结果：

细胞内酸性黏液多糖	紫红色
背景	淡蓝色或无色

注意事项：

1. 为了证实染色效果，可选用慢性粒细胞白血病血片(嗜碱性粒细胞)或肺石蜡切片(组织嗜碱性粒细胞)作强阳性对照。也可使用正常小鼠新鲜全血涂片作为参照，嗜碱性粒细胞比例约为500-600个/μL，需仔细观察。
2. 常规涂布细胞涂片参照400μL/cm^{2}的比例滴加染色液染色。
3. 由于溶剂为有机溶剂，在染色过程中可适量补液防止干燥。
4. 长时间水浸泡会造成褪色，建议染色后尽快观察。
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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Toluidine Blue Stain Solution, For Cell

Cat: G3660
Size: 20mL/50mL
Storage:2-8℃, 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.

Toluidine Blue Stain Solution, For Cell is suitable for intracellular acid mucopolysaccharide staining, especially for sour acid mucopolysaccharide staining. After staining, acid mucopolysaccharide is red.

Protocol(*for reference only*)

For Cell Smear

1. Prepare the cell suspension and wash twice with PBS. Add 20-50μL to the glass slide and spread carefully. Dry the cell smear at room temperature or 37 ℃.
2. Add 200-400μL Toluidine Blue Stain Solution, For Cell and stain for 5 min. (see Note 2)
3. Add equal amount of distilled water to smear, mix well and dye for 15min.
4. Wash with distilled water twice and for 30s each time,air dry, seal with neutral resin and observe under microscope.

For Culture Cell

1. Suck the culture medium off and wash twice with PBS for 1 min each time.
2. Add Toluidine Blue Stain Solution, For Cell and stain for 5 min.
3. Add equal amount of distilled water, gently blow or shake the culture plate, mix well, and let it stand for 15min.
4. Wash 2 times with distilled water and 30s for each time, add appropriate amount of distilled water, and immerse completely, and conduct microscopic examination. (see note 4)

Result

Acid Mucopolysaccharide In Cell	Red
Background	Pale Blue or Colorless

Note

1. In order to confirm the staining effect, chronic myeloid leukemia blood slides (basophils) or lung paraffin sections (tissue basophils) can be selected as strong positive controls. The fresh whole blood smear of normal mice can also be used as a reference, and the proportion of basophils is about 500-600/μl. Careful observation is required.
2. Conventional coating cell smears were stained with the ratio of 400μL/ cm^2.
3. As the solvent is organic, it can be replenished to prevent drying.
4. It is suggested to observe as soon as possible after dyeing.
5. For your safety and health, please wear lab clothes and disposable gloves.