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# 阿利新蓝染色液(细胞专用)

**货号:** G1565

规格: 2×20mL/2×50mL

**保存:** 2-8℃, 避光保存, 有效期1年。

## 产品组成:

名称	2×20mL	2×50mL	保存
试剂(A): Alcian 染色液	20mL	50mL	2-8℃, 避光
试剂(B): Alcian 复染液	20mL	50mL	室温, 避光

## 产品介绍:

阿利新蓝(Alcian)又称爱先蓝或阿尔辛蓝等,是一种类铜钛花青共轭染料,最初用于纺织纤维染色。这种阳离子染料与酸性基团结合,也即阿尔辛蓝与组织内含有的阴离子基团如羧基和硫酸根形成不溶性复合物。阿利新蓝由中央含铜的酞菁环与四个异硫脲基通过硫醚键相连而成,该异硫脲基呈中度碱性,使阿利新蓝带阳离子。pH值为2.5时,组织内的羧基电离,带有一个负电荷,与阿利新蓝中的阳离子形成盐键,使带有羧基的酸性黏液物质(硫酸黏蛋白和唾液黏蛋白)染色。

阿利新蓝染色液(细胞专用)采用改良 Lison 法,利用染液的不同 pH 值可区分粘液物质的类属。中性黏蛋白(如胃黏膜和 Brunner 腺体部位的中性黏蛋白)不能与阿利新蓝反应。本试剂仅适用于科研领域,特别适用于细胞涂片染色,不适用于临床诊断或其他用途。

### 自备材料:

甲醇、蒸馏水

## 操作步骤: (仅供参考)

- 1. 制备新鲜涂片,用甲醇固定 5min。蒸馏水洗,稍晾干。
- 2. 滴加 Alcian 染色液染色 30min。蒸馏水洗 2 次,每次 1min。
- 3. 滴加 Alcian 复染液复染 30-60s。
- 4. 水洗,晾干,镜检。

### 染色结果:

酸性黏多糖	蓝绿色
细胞核	红色

## 注意事项:

- 1. Alcian 染色液呈酸性,染色时应与普通染色分开,否则影响细胞着色。
- 2. Alcian 染色液染色后,涂片应充分水洗,否则影响复染效果。
- 3. 已开封试剂应在开封后6个月内使用完,每次用后应及时拧紧瓶盖,以免挥发或变质。
- 4. 为了您的安全和健康,请穿实验服并戴一次性手套操作。

## Alcian Blue Stain Kit For Cytospin

Cat: G1565

Size:  $2\times20$ mL/ $2\times50$ mL

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

### **Kit Components**

Reagent	2×20mL	2×50mL	Storage
Reagent A: Alcian Solution (pH 2.5)	20mL	50mL	2-8°C, avoid light
Reagent B : Alcian Counterstain Solution	20mL	50mL	RT, avoid light

### Introduction

Alcian Blue is a copper-titanium-like cyanine conjugate dye, which was originally used in textile fiber dyeing. This cationic dye binds to an acid group. That is to say, Alcian Blue forms insoluble complexes with anionic groups such as carboxyl and sulfate radicals in tissues. Alcian Blue is formed by linking the central copper-containing phthalocyanine ring with four isothiourea groups via thioether bonds. The isothiourea group is moderately alkaline, which makes Alcian Blue band cationic. When the pH value is 2.5, the carboxyl groups in the tissues are ionized with a negative charge and form a salt bond with the cations in Alcian Blue to stain the acid mucous substances with carboxyl groups (sulfuric acid mucin and salivary mucin).

Alcian Blue Stain Kit For Cytospin was used by modified Lison method. The genus of mucous substances could be distinguished by different pH values of the staining solution. Neutral mucin (such as neutral mucin in gastric mucosa and Brunner gland) does not react with Alcian Blue. This reagent is only suitable for scientific research, especially for cell smear staining. It is not suitable for clinical diagnosis or other purposes.

### **Self Provided Materials**

Distilled water, Methanol

### **Protocol**(for reference only)

- 1. Prepare fresh smear and fix it with methanol for 5 min. Wash and dry.
- 2. Stain with Alcian Solution (pH 2.5) for 30 min. Wash thoroughly and dry.
- 3. Stain with Alcian Counterstain Solution for 30-60 s.
- 4. Wash, air-dry, microscopic examination.

### Result

Acidic Mucopolysaccharide	Bluish Green
Nucleus	Red

### Note

- 1. Alcian staining solution is acidic. It should be separated from ordinary staining, otherwise it will affect cell staining.
- 2. After dyeing with Alcian dye solution, the smear should be washed sufficiently, otherwise the effect of re-dyeing will be affected.
- 3. The opened reagent should be used up within 6 months after opening. The cap should be tightened in time after each use to avoid volatilization or deterioration.
- 4. For your safety and health, please wear lab clothes and disposable gloves.