

## 软骨染色试剂盒（阿利新蓝法，pH1.0）

货号：G2541

规格：2×50mL

保存：2-8℃，避光保存，有效期 1 年。

### 产品组成：

名称	2×50mL	保存
试剂(A): Alcian 酸化液	50mL	室温
试剂(B): Alcian 染色液(pH1.0)	50mL	2-8℃，避光

### 产品介绍：

阿利新蓝(Alcian Blue 8GX)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，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。

软骨染色试剂盒（阿利新蓝法，pH1.0）利用染液的不同 pH 值可区分粘液物质的类属，pH 为 1 时，羧基(COOH)不着色，硫酸基(OSO<sub>3</sub>H)着色，pH 为 2.5 时，羧基染色良好而硫酸粘液着色不佳，使硫酸黏蛋白和唾液黏蛋白着色。本试剂仅适用于科研领域，不适用于临床诊断或其他用途。

### 操作说明：（仅供参考）

- 1、常规脱钙，二甲苯脱蜡，通过梯度乙醇后，入蒸馏水水化。
- 2、入 Alcian 酸化液浸泡 3min。
- 3、入 Alcian 染色液(pH1.0)染色 30min。
- 4、流水冲洗 5min。
- 5、梯度乙醇脱水，二甲苯透明，中性树胶封片。

### 染色结果：

硫酸黏蛋白	蓝色
细胞核	淡蓝色

### 注意事项：

- 1、固定液采用 10%中性福尔马林。
- 2、该法可区分鉴别硫酸黏蛋白和蛋白多糖，其 pH=1.0。
- 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。

### 参考文献：

## Alcian Blue Cartilage Stain Kit, pH 1.0

**Cat:** G2541

**Size:** 2×50mL

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

### Kit Components

Reagent	2×50mL	Storage
Reagent (A): Alcian Acidic Solution	50mL	RT
Reagent (B): Alcian Staining Solution(pH1.0)	50mL	2-8°C, avoid light

### Introduction

Alcian Blue 8GX also known as Alcian Blue, is a kind of copper titanium cyan conjugate dye, which was originally used for textile fiber dyeing. This kind of cationic dye combines with acid group, that is, alcian blue forms insoluble complex with anionic group such as carboxyl group and sulfate group. Alcian Blue is composed of the central copper containing phthalocyanine ring and four isothiurea groups linked by thioether bond. The isothiurea group is moderately alkaline, making Alcian Blue with cation.

Alcian Blue Cartilage Stain Kit, pH 1.0 can distinguish the genus of mucus by different pH value of staining solution. When pH value is 1, carboxyl group(COOH) is not dyed, and sulfuric acid group(OSO<sub>3</sub>H) is dyed. When pH value is 2.5, COOH is dyed well, while OSO<sub>3</sub>H is dyed bad, which makes mucin sulfate and mucin saliva stain. This reagent is only suitable for scientific research, not for clinical diagnosis or other purposes.

### Protocols(for reference only)

1. Conventional decalcification, dewax to distilled water.
2. Soak in Alcian Acidic Solution for 3min.
3. Stain with Alcian Staining Solution(pH1.0) for 30min.
4. Rinse in running water for 5min.
5. Dehydrate in series of ethanol, transparent in xylene and seal with resinene.

### Result

Sulfated Mucin	Blue
Nucleus	Light Blue

### Note

1. The fixative adopts 10% neutral formalin.
2. This method can distinguish sulfated mucin and proteoglycan when pH value is 1.0.
3. The opened reagent shall be used up within 6 months after open, and the cap shall be tightened timely after each use to avoid volatilization or deterioration.
4. For your safety and health, please wear experimental clothes and disposable gloves.

### Reference