

## 阿利新蓝染色试剂盒(pH=2.5)

货号: G1560

规格: 3×50mL/3×100mL

保存: 室温, 避光保存, 有效期 6 个月。

### 产品组成:

名称	3×50mL	3×100mL	保存
试剂(A): Alcian 酸化液	50mL	100mL	室温
试剂(B): Alcian 染色液	50mL	100mL	室温, 避光
试剂(C):核固红染色液	50mL	100mL	室温, 避光

### 产品介绍:

阿利新蓝 (Alcian) 又称爱先蓝或阿尔辛蓝等, 是一种类铜钽花青共轭染料, 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, 可以在不同 pH 下与不同阴离子集团结合并着色。在 pH 2.5 时可染色普通酸性间充质粘蛋白, 在 pH 1.0 染色硫酸化粘蛋白和在 pH 0.5 染色复合酸结缔组织粘蛋白, 不染色中性粘蛋白。

阿利新蓝染色试剂盒(pH=2.5)能够对唾液酸亦称透明质酸修饰的糖蛋白进行染色, 可用于进行软骨染色, 粘蛋白染色和肠化生程度判定, 还可用于粘液性上皮肿瘤的鉴别和肿瘤中是否含有粘液物质的证明。本试剂盒含核固红复染液可对细胞核进行着色辅助形态学观察。

### 操作步骤: (仅供参考)

试剂(C):核固红染色液可能会由于絮凝产生悬浮物或少量沉淀, 建议取上清使用或沸水浴 5-10min 后晾至 30-40℃使用。(见注意事项 2)

1. 对于切片脱蜡至水, 对于细胞爬片或者细胞悬液则直接用多聚甲醛固定。
2. 入 Alcian 酸化液浸泡 3min。
3. 入 Alcian 染色液染色 30min。流水冲洗。
4. 入核固红染色液复染 5min。流水冲洗 1min。
5. 梯度乙醇脱水, 二甲苯透明, 中性树胶封片。

### 染色结果:

硫酸化粘液质 (硫酸黏蛋白和唾液黏蛋白)	蓝色
羧酸化粘液质 (蛋白多糖, 透明质酸)	蓝色
细胞核	红色

### 注意事项:

1. 固定液推荐使用 10%中性福尔马林。
2. 试剂(C):核固红染色液为胶体性质溶液, 低温 (低于 25℃) 保存或长期储存由于絮凝产生悬浮物或少量沉淀, 属于正常现象, 一般不影响使用。如移液器吸取观察到明显浑浊, 可拧紧瓶盖沸水浴 5-10min 重新制备分散均匀的胶体溶液来恢复使用。
3. 若要选择性鉴别硫酸化粘液质和羧酸化粘液质, 应使用 pH=1.0 的阿利新蓝, 即调 pH 值为 1.0。染色时间可根据染色深度做相应调整。
4. 本试剂仅适用于科研领域, 不适用于临床诊断或其他用途。
5. 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:

G1563 阿利新蓝染色试剂盒 (pH=1.0)

G1562 阿利新蓝染色液 (pH2.5)

## Alcian Blue Stain Kit, pH 2.5

**Cat:** G1560

**Size:** 3×50mL/3×100mL

**Storage:** RT, avoid light, valid for 6 months.

### Kit Components

Reagent	3×50mL	3×100mL	Storage
Reagent (A): Alcian Acidic Solution	50mL	100mL	RT
Reagent (B): Alcian Staining Solution	50mL	100mL	RT, avoid light
Reagent (C): Nuclear Fast Red Solution	50mL	100mL	RT, avoid light

### Introduction

Alcian, also known as alcian blue 8GX, is a conjugated dye of copper titanium cyanine, which was originally used for textile fiber dyeing. This cationic dye combines with acidic groups, that is, alcian blue forms an insoluble complex with anionic groups such as carboxyl groups and sulfate groups contained in the tissue. Alcian blue is formed by connecting the central copper containing phthalocyanine ring with four isothiourea groups through thioether bonds. It can be combined with different anion groups at different pH and colored. Ordinary acidic mesenchymal mucin can be stained at pH 2.5, sulfated mucin can be stained at pH 1.0 and complex acid connective tissue mucin can be stained at pH 0.5, and neutral mucin is not stained.

Alcian Blue Stain Kit, pH 2.5 can stain glycoprotein modified by sialic acid, also known as hyaluronic acid. It can be used for cartilage staining, mucin staining and determination of intestinal metaplasia. It can also be used for identification of mucinous epithelial tumors and proof of whether mucinous substances are contained in tumors. This kit contains nuclear solid red double staining solution, which can be used for coloring and morphological observation of nuclei.

### Protocols(for reference only)

*Reagent (C): Nuclear Fast Red Solution may produce suspended solids or a small amount of precipitation due to flocculation. It is recommended to take supernatant or boil water bath for 5-10min and then air it to 30-40 °C. (see Note 2)*

1. For paraffin sections, dewax to distilled water. For cell smear or cell suspension, fix in paraformaldehyde.
2. Soak in Alcian Acidic Solution for 3mins.
3. Stain with Alcian Staining Solution for 30mins.
4. Wash in running tap water.
5. Re-dyeing with Nuclear Fast Red Solution for 5mins.
6. Wash in running tap water for 1 min.
7. Dehydrate in series of alcohol, transparent by xylene and seal with resinene.

### Result

Sulfated Mucin (Sulfated Mucin and Salivary Mucin)	Blue
Carboxylated Mucin (Proteoglycan, Hyaluronic Acid)	Blue
Nucleus	Red

### Note

1. The fixative adopts 10% neutral formalin.
2. Reagent (C): Nuclear Fast Red Solution is a colloidal solution, which is stored at low temperature (lower than 25 °C) or stored for a long time. Suspended solids or a small amount of precipitation are generated due to flocculation, which is a normal phenomenon and generally does not affect the use. If the colloid solution is evenly dispersed in the boiling bath, tighten the bottle cap for 5-10min to recover the turbid solution.
3. To selectively identify sulfated mucin and carboxylated mucin, alcian blue with pH is 1.0 should be used, it is to adjust the pH value to 1.0. The dyeing time can be adjusted according to the dyeing degree.
4. This reagent is only suitable for scientific research, not for clinical diagnosis or other purposes.
5. For your safety and health, please wear experimental clothes and disposable gloves.

### Related Products

G1563 Alcian Blue Stain Kit, pH 1.0

G1562 Alcian Blue Solution, pH 2.5