

阿利新蓝染色液 (pH2.5)

货号: G1562

规格: 100mL

保存: 室温, 避光保存, 有效期 6 个月。

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, 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。

阿利新蓝染色液 (pH2.5) 染色原理为: 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, 使带有羧基的组织(如蛋白多糖/透明质酸以及上皮酸性黏蛋白)染色, 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。

操作步骤: (仅供参考)

1. 二甲苯脱蜡, 通过梯度乙醇后, 入蒸馏水再水化。
2. 阿利新蓝染色液(pH2.5)滴染或浸染 30min。蒸馏水洗 1-2min。
3. (可选) 滴加核固红染色液复染 5min。蒸馏水洗 1min。
4. 常规梯度乙醇脱水, 二甲苯透明, 中性树胶封片。

染色结果:

酸性黏蛋白 (硫酸黏蛋白和唾液黏蛋白)	蓝色
蛋白多糖和透明质酸	蓝色
细胞核	红色

注意事项:

1. 固定液采用 10% 中性福尔马林。
2. 若要选择性鉴别硫酸黏蛋白和蛋白多糖, 应使用 pH 值低(pH=1.0)的阿利新蓝, 即调 PH 值为 1.0。染色程序与 pH=2.5 的阿利新蓝操作相同, 染色时间应相应延长。
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。

相关产品:

G1563 阿利新蓝染色试剂盒(pH=1.0)

G1560 标准阿利新蓝染色试剂盒





Alcian Blue Solution, pH 2.5

Cat: G1562

Size: 100mL

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

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 isothiurea groups through thioether bonds. It can be combined with different anion groups at different pH and colored.

The principle of Alcian Blue Solution, pH 2.5 is that when pH value is 2.5, the carboxyl group in the tissue is ionized with a negative charge and forms a salt bond with the cation in alcian blue, then the mucin with carboxyl group (such as proteoglycan / hyaluronic acid and epithelial acid mucin) is well dyed, while the sulfated mucin is poorly dyed. The neutral mucin in gastric mucosa and Brunner gland could not react with alcian blue.

Protocol(for reference only)

1. For paraffin sections, dewax to distilled water.
2. Stain with Alcian Blue Solution(pH 2.5) for 30 min. Wash in distilled water for 1-2min.
3. (Optional)Re-dyeing with Nuclear Fast Red Solution for 5 min. Wash in distilled water for 1 min.
4. 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. 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 procedure is the same as that of alcian blue with pH is 2.5, and the dyeing time should be prolonged accordingly.
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.

Related Products

G1563 Alcian Blue Stain Kit, pH 1.0

G1560 Alcian Blue Stain Kit, pH 2.5

