

透明质酸染色液

货号: G3710

规格: 2×50mL

保存: 2-8℃, 避光保存, 有效期 6 个月。

产品组成:

名称	2×50mL	保存
试剂(A): 透明质酸消化液	50mL	2-8℃, 避光
试剂(B): 阿利新蓝染色液	50mL	2-8℃, 避光
试剂(C): 阴性对照液	10mL	室温

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。这种阳离子染料可以与酸性基团结合, 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蓝色的不溶性复合物。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。这种结构使阿利新蓝在水溶液中水解为阳离子, 可以与组织内的多聚阴离子结合。

透明质酸染色液采用透明质酸酶联合阿利新蓝染色, 其原理在于透明质酸酶可以裂解透明质酸和硫酸软骨素的糖苷键。在阿利新蓝染色前用透明质酸酶做标本预处理, 在未处理的切片相比, 若处理过的切片不着色, 则表明组织中存在透明质酸和硫酸软骨素; 若预处理没有产生影响, 则说明组织不含透明质酸和硫酸软骨素。

自备材料:

系列乙醇、去离子水、恒温箱

操作步骤: (仅供参考)

1. 取 2 张阳性对照片和 2 张实验片, 分成消化组和对照组。二甲苯脱蜡, 通过梯度乙醇后, 再入去离子水水化。
2. 取消化组的阳性对照片和实验片用透明质酸消化液处理, 37 度孵育 3 小时。对照组的阳性对照片和实验片用阴性对照液处理, 37 度孵育 3 小时。孵育后流水冲洗 5min。
3. 入阿利新蓝染色液染色 30min, 流水冲洗 5min。
4. 梯度乙醇脱水, 二甲苯透明, 混合封片剂封片。

染色结果:

透明质酸和 (或) 硫酸软骨素经酶处理	不着色
透明质酸和 (或) 硫酸软骨素未经酶处理	蓝色

注意事项:

1. 每批次染色需使用阳性对照片以检测酶的活性。
2. 酶处理效率跟温度存在一定相关性, 可使用 60℃ 1h 孵育替代 37℃ 3h。
3. 为了您的安全和健康, 请穿实验服并戴一次性手套操作。

Hyaluronic Acid Stain Solution

Cat: G3710

Size: 2×50mL

Storage: 2-8℃, avoid light, valid for 6 months.

Kit Components

Reagent	2×50mL	Storage
Reagent(A): Digestion Solution	50mL	2-8℃,avoid light
Reagent(B): Alican Stain Solution	50mL	2-8℃,avoid light
Reagent(C): Negative Solution	10mL	RT

Introduction

Alcian is a kind of copper titanium cyan conjugated dye, which was originally used for textile fiber dyeing. This kind of cationic dye can combine with acidic groups, that is, alcian blue forms an insoluble blue complex with anionic groups such as carboxyl and sulfate.

Hyaluronidase combined with alcian blue staining is used in the Hyaluronic Acid Stain Solution. The principle is that hyaluronidase can cleave the glycosidic bond of hyaluronic acid and chondroitin sulfate. Before alcian blue staining, the sample is pretreated with hyaluronidase. Compared with the untreated section, if the treated section is not stained, it indicates that there are hyaluronic acid and chondroitin sulfate in the tissue. If there is no effect, the tissue does not contain hyaluronic acid and chondroitin sulfate.

Self Provided Materials

Series ethanol, Distilled Water, Warm Box

Protocol(for reference only)

1. Divide two positive sections and two experimental sections into two groups (Digestion Group and Control Group), dewax by xylene and series ethanol to water.
2. Treat Digestion Group with Digestion Solution and incubate at 37 °C for 3 h. Treat Control Group with Negative Solution and incubate at 37 °C for 3 h. Rinse with running water for 5 min.
3. Add alcian blue staining solution for 30 min, rinse with running water for 5 min.
4. Gradient ethanol dehydration, xylene transparent, mixed sealing agent sealing. Conventional fixation, conventional paraffin embedding.

Result

Hyaluronic acid(Digestion Group)	Colorless
Hyaluronic acid(Control Group)	Blue

Note

1. Positive sections should be used in each batch to detect enzyme activity.
2. There was a certain correlation between enzyme treatment efficiency and temperature, and 60 °C for 1 h could be used instead of 37 °C for 3 h.
3. For your safety and health, please wear lab clothes and disposable gloves.