

黏蛋白 HID-AB 染色试剂盒

货号: G2070

规格: 3×50mL

保存: 2-8℃, 避光保存, 有效期 6 个月。

产品组成:

名称		3×50mL	保存
试剂(A): HID 染色工作液	A1:HID 溶液 A	50mL	室温, 避光
	A2:HID 溶液 B	3mL	室温, 避光
临用前, 按 A1:A2=50:3 混合即为 HID 染色工作液, 不宜提前配制。			
试剂(B): Alcian 染色液		50mL	2-8℃, 避光
试剂(C): 核固红染色液		50mL	室温, 避光

产品介绍:

黏蛋白 HID-AB 染色原理在于高铁二胺盐中的二铵盐与硫酸化酸性黏液物质结合, 形成复合物而被显色。在 pH 值大大低于 2.5 时, 组织内的硫酸根电离, 带有一个负电荷, 与 HID 中的阳离子形成盐键, 使带有硫酸根的组织(如硫酸黏液物质)染色, 硫酸化酸性黏液物质等形成棕紫色至棕黑色。

黏蛋白 HID-AB 染色试剂盒主要用于鉴别硫酸化酸性黏液物质和唾液酸性黏液物质, 小肠上皮产生氮乙酰化唾液酸性黏液物质, 大肠上皮产生氧乙酰化唾液酸性黏液物质和硫酸化酸性黏液物质。该法可配合 AB-PAS 染色, 对肠上皮化生的类型进行鉴定, 对转移性肿瘤发生黏液的类型进行鉴定。

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、切片脱蜡至蒸馏水。
- 2、入配制好的 HID 染色工作液浸染 12-24h (20-25℃)。流水冲洗 5min。
- 3、入 Alcian 染色液染色 10-20min。稍水洗。
- 4、入核固红染色液复染 10min。流水冲洗 1min。
- 5、梯度乙醇脱水, 二甲苯透明, 中性树脂封片。

染色结果:

硫酸化酸性黏液物质(如硫酸黏蛋白和唾液黏蛋白)	棕紫色至棕黑色
羧基化蛋白酸性黏液物质(如蛋白多糖和透明质酸)	蓝色
细胞核	红色

注意事项:

- 1、固定液推荐采用 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、HID 染色工作液不宜提前配制。用后可存储于 4℃, 仍可用 1~2 次, 但特异性不佳。
- 4、HID 染色工作液对人体有一定损害, 请小心操作, 避免接触人体皮肤。
- 5、为了您的安全和健康, 请穿实验服并戴一次性手套操作。

High Iron Diamine/Alcian Blue(HID/AB) Mucin Stain Kit

Cat: G2070

Size: 3×50mL

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

Kit Components

Reagent		3×50mL	Storage
Reagent(A): HID Solution	A1:HID Solution A	50mL	RT, avoid light
	A2:HID Solution B	3mL	RT, avoid light
Before use, mix A1 with A2 as the ratio of 50:3 to form HID Solution. It is not suitable to prepare in advance.			
Reagent(B): Alcian Staining Solution		50mL	2-8°C, avoid light
Reagent(C): Nuclear Fast Red Solution		50mL	RT, avoid light

Introduction

The principle of High Iron Diamine/Alcian Blue(HID/AB) Mucin Stain Kit is that the diammonium salt in the high iron diamine salt combines with sulfuric acid mucus to form a complex and be colored. When the pH value is much lower than 2.5, the sulfate radical in the tissue is ionized with a negative charge, forming a salt bond with the cation in HID, making the tissues with sulfate radical (such as sulfuric acid mucus) dye, sulfuric acid mucus material, etc. form brownish purple to brownish black.

High Iron Diamine/Alcian Blue(HID/AB) Mucin Stain Kit is mainly used to identify sulfated acid mucus and sialic acid mucus. Nitrogen acetylated sialic acid mucus is produced in small intestine epithelium, oxygen acetylated sialic acid mucus and sulfated acid mucus are produced in large intestine epithelium. This method can be used with AB-PAS staining to identify the type of intestinal metaplasia and the type of mucus in metastatic tumors.

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. Dewax the paraffin section to distilled water.
2. Soak in the prepared HID Solution for 12-24 hours (20-25 °C).
3. Rinse with running water for 5mins.
4. Add Alcian Staining Solution for 10-20mins.
5. Slightly wash with water.
6. Re-dyeing with Nuclear Fast Red Staining Solution for 10mins.
7. Rinse in running water for 1min.
8. Dehydrate in series of ethanol, transparent by xylene and seal with resinene.

Result

Sulfated acid mucus (such as sulfated mucin and salivary mucin)	Brownish Purple to Brownish Black
Carboxylated protein acidic mucus substances (such as proteoglycans and 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. HID Solution is not suitable to be prepared in advance. After use, it can be stored at 4 °C and used for 1-2 times, but its specificity is not good.
4. HID Solution is harmful to human body. Please operate it carefully to avoid contact with human skin.
5. For your safety and health, please wear experimental clothes and disposable gloves.