

## Gordon-Sweets 氨银溶液

货号: G3520

规格: 100mL

保存: 2-8°C, 避光保存, 有效期 6 个月。

### 产品介绍:

网状纤维(Reticular fiber)是网状结缔组织内的一种纤维,由网状细胞所产生,直径多在 0.2~1.0 $\mu\text{m}$ ,有韧性而没有弹性。网状纤维的染色方法很多,但染色原理基本一致,大都采用氨银浸法。Gordon-Sweets 网状纤维染色原理是利用氨银液易被组织吸附与组织的蛋白质结合,经甲醛还原成黑色或棕黑色的金属银,沉积于组织内及其表面。

冰冻切片、石蜡切片和火棉胶切片均可用于网状纤维染色。各种固定液均可采用,重金属汞盐或钼盐固定液偶尔会产生一些非特异性银背景。常用于鉴别肿瘤的性质和来源。

### 操作步骤: (仅供参考)

1. 组织固定于 10%福尔马林固定液,常规脱水包埋。
2. 切片厚 4 $\mu\text{m}$ , 常规脱蜡至水。
3. 切片滴加配制好的 Gordon-Sweets 氧化剂氧化 3min, 水稍洗。
4. 草酸溶液漂白 1min, 流水冲洗, 蒸馏水稍洗。
5. 滴加硫酸铁铵溶液媒染 10min, 稍水洗, 蒸馏水稍洗。
6. 滴加 Gordon-Sweets 银氨溶液染色 11s, 蒸馏水稍洗。
7. 滴加 Gordon-Sweets 还原剂还原 2min, 流水冲洗 2min。
8. 滴加核固红染色液复染细胞核 10min, 稍水洗。
9. 常规脱水透明, 中性树胶封片。

### 染色结果:

网状纤维	黑色
胶原纤维	黄色至黄棕色
细胞核	红色





## Gordon-Sweet's Ammoniacal Silver Stain Solution

**Cat:** G3520

**Size:** 100mL

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

### Introduction

Reticular fiber is a kind of fiber in reticular connective tissue, which is produced by reticular cells. Its diameter is mostly 0.2-1.0 $\mu$ m. It has toughness but no elasticity. There are many dyeing methods for reticular fiber, but the dyeing principle is basically the same, and most of them adopt ammonia silver staining method. The dyeing principle of Gordon-Sweet's Ammoniacal Silver Stain Solution is that ammonia silver solution is easy to be adsorbed by tissue and combined with protein of tissue. It is reduced to black or brown black metallic silver by formaldehyde and deposited in tissue and on its surface.

Frozen section, paraffin section and collodion section can be used for reticular fiber staining. All kinds of fixatives can be used, and the heavy metal mercury salt or osmium salt fixatives occasionally produce some non-specific silver background. It is often used to identify the nature and source of tumors.

### Protocols (for reference only)

1. Fix the tissue in 10% formalin fixative and dehydrate and embed.
2. Cut into paraffin section in 4 $\mu$ m thick, and dewax to distilled water.
3. Drop prepared Gordon-Sweets Oxidant and oxidize for 3mins. Wash it with water slightly.
4. Add Oxalic Acid Solution for 1 min. Rinse with running water and slightly with distilled water.
5. Add Ammonium Ferric Sulfate Solution for 10mins. Wash slightly with distilled water.
6. Stain with Gordon-Sweet's Ammoniacal Silver Stain Solution for 11s. Wash slightly with distilled water.
7. Reduce by Gordon-Sweets Reductant for 2mins and rinse with running water for 2mins.
8. Re-dyeing with Nuclear Fast Red Staining Solution for 10mins and wash slightly with water.
9. Conventionally dehydrate, transparent and seal with resinene.

### Result

Reticular Fiber	Black
Collagen Fiber	Yellow to Yellowish Brown
Nucleus	Red

