

## 改良 Masson 三色染色液

### 产品简介:

结缔组织狭义上是指其含有的三种纤维: 胶原纤维、网状纤维、弹力纤维,而胶原纤维(collagen fiber)是分布最广、含量最多的一种纤维。Masson 三色染色又称马松染色,是结缔组织染色中最经典的一种方法,是胶原纤维染色权威而经典的技术方法。所谓三色染色通常是指染胞核和能选择性的显示胶原纤维和肌纤维,该法染色原理与阴离子染料分子的大小和组织的渗透有关: 分子的大小由分子量来体现,小分子量易穿透结构致密、渗透性低的组织; 而大分子量则只能进入结构疏松的、渗透性高的组织,然而淡绿或苯胺蓝的分子量都很大,因此 Masson 染色后肌纤维呈红色,胶原纤维呈绿色(淡绿)或蓝色(苯胺蓝),主要用于区分胶原纤维和肌纤维。

Leagene 改良 Masson 三色染色与常规 Masson 三色染色的区别在于采用天青石蓝苏木素淡染细胞核,其特点在于分化时间短(1 ~ 2min); 色彩清晰鲜艳; 适用范围广,适宜于组织的石蜡切片、冰冻切片等染色; 所染切片保存时间长且不易褪色; 胶原纤维呈蓝色,肌纤维、胞质、纤维素、角蛋白和红细胞呈红色,胞核呈蓝褐色,主要用于区分胶原纤维和肌纤维。该试剂仅用于科研领域,不适用于临床诊断或其他用途。

### 产品组成:

| 名称                  | 编号 | DC0033<br>8×50ml | Storage |
|---------------------|----|------------------|---------|
| 试剂(A): Bouin 液      |    | 50ml             | RT      |
| 试剂(B): 天青石蓝染色液      |    | 50ml             | 4°C 避光  |
| 试剂(C): Mayer 苏木素染色液 |    | 50ml             | RT      |
| 试剂(D): 酸性乙醇分化液      |    | 50ml             | RT      |
| 试剂(E): 丽春红品红染色液     |    | 50ml             | RT      |
| 试剂(F): 磷钼酸溶液        |    | 50ml             | RT 避光   |
| 试剂(G): 苯胺蓝染色液       |    | 50ml             | RT      |
| 试剂(H): 弱酸溶液         |    | 50ml             | RT      |
| 使用说明书               |    | 1 份              |         |

### 自备材料:

- 1、10%福尔马林固定液、蒸馏水、系列乙醇
- 2、二甲苯或环保脱蜡透明液、中性树胶

**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,切片厚 4 $\mu$ m,常规脱蜡至水。
- 2、切片入 Bouin 液,室温作用一晚或置入 37℃温箱内 2h 进行媒染,然后流水冲洗至切片上的黄色消失。
- 3、天青石蓝染色液滴染 2~3min,稍水洗。
- 4、Mayer 苏木素染色液滴染 2~3min,稍水洗。
- 5、酸性乙醇分化液分化数秒,流水冲洗 10min。
- 6、丽春红品红染色液滴染 10min,蒸馏水稍冲洗。
- 7、磷钼酸溶液处理约 10min。
- 8、倾去上液,切片不用水洗,直接滴入苯胺蓝染色液染 5min。
- 9、弱酸溶液处理 2min。
- 10、95%的乙醇快速脱水。无水乙醇脱水 3 次,每次 5~10s。
- 11、二甲苯或 Leagene 脱蜡透明液透明 3 次,每次 1~2min,中性树胶封固。

**染色结果:**

|                    |     |
|--------------------|-----|
| 胶原纤维               | 蓝色  |
| 肌纤维、胞质、纤维素、角蛋白和红细胞 | 红色  |
| 细胞胞核               | 蓝褐色 |

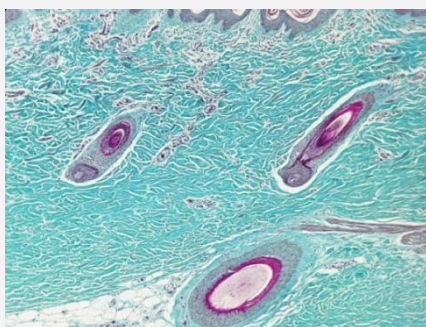
**注意事项:**

- 1、切片脱蜡应尽量干净。酸性乙醇的分化时间应根据切片薄厚,组织的类别和新旧而定。
- 2、磷钼酸的作用一方面是使染上红色的胶原纤维被分化成无色或淡红色,而肌纤维纤维素等仍呈鲜红色;另一方面对胶原纤维又起媒染作用,使胶原纤维与苯胺蓝液较易结合。
- 3、苯胺蓝液染色后用弱酸溶液处理,目的是除去原浆内的蓝色,使染色鲜艳和清晰。如 Zenker 液固定的组织,弱酸溶液处理可延长至 5min。
- 4、弱酸溶液可使色彩更清晰鲜艳,如使用量大可自行配制 0.1~0.3%乙酸溶液予以替代。
- 5、为了您的安全和健康,请穿实验服并戴一次性手套操作。

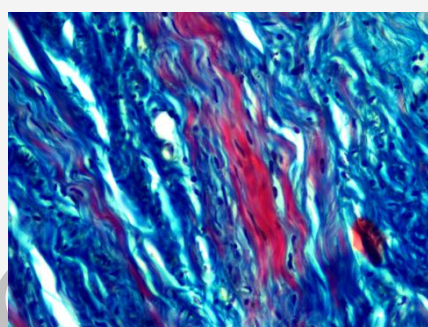
**有效期:** 12 个月有效。常温运输,按要求保存。

**相关产品:**

| 产品编号   | 产品名称                   |
|--------|------------------------|
| DC0032 | Masson 三色染色液           |
| DF0135 | 组织细胞固定液(4% PFA)        |
| DH0005 | Mayer 苏木素染色液           |
| DZ2011 | 环保浸蜡脱蜡透明液              |
| IH0270 | 甘油明胶封固液                |
| PW0053 | Western 抗体洗脱液(碱性)      |
| TC0699 | 植物总糖和还原糖检测试剂盒(DNS 比色法) |



(固绿复染)



(苯胺蓝复染)

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