

## Mallory 酸性苏木素染色液(化学氧化法)

货号: G1383

规格: 100mL

保存: 室温, 避光保存, 有效期 3 个月。

### 产品介绍:

肌纤维(Muscle fiber) 属于肌组织成分, 由肌细胞组成。根据形态和功能特点, 肌纤维可以分为平滑肌(又称横纹肌)、骨骼肌和心肌。肌纤维染色的方法有很多种, 如丽春红法、苯胺蓝法、磷钨酸苏木素法等。

Mallory 酸性苏木素染色液(化学氧化法)为化学催熟的染液, 短时间内染色力较好, 保存时间不宜过长。多用于显示横纹肌的横纹, 用该法对横纹肌肉瘤进行诊断。也可以对炎症渗出的纤维素、DIC 的毛细血管中纤维素以及神经病理等方面进行染色。

### 操作步骤: (仅供参考)

1. 组织推荐固定于 10%福尔马林固定液或 4%多聚甲醛固定液中, 常规脱水包埋。
2. 推荐石蜡切片厚度 3-5 $\mu$ m, 常规脱蜡至蒸馏水。
3. (自备)滴加新配制好的 PTAH 氧化剂覆盖切片氧化 5min。蒸馏水洗 5-10s 洗去多余试剂。
4. (自备)滴加草酸溶液覆盖切片漂白 1-2min。自来水冲洗 2min, 用蒸馏水平衡 2min。
5. 浸入 Mallory 酸性苏木素染色液(化学氧化法)浸染(加盖), 染色 24h~48h。
6. 取出切片, 直接用 95%的乙醇洗去多余的染液。
7. 无水乙醇脱水 30s, 二甲苯透明 1min, 中性树胶封片。

### 染色结果:

横纹肌横纹、纤维蛋白、细胞核和神经胶质纤维	深蓝色
胶原纤维、软骨基质	棕红色
粗的弹力纤维	紫色

### 注意事项:

1. 若染色后所显示横纹的蓝色不够或横纹呈鲜红色, 说明染色液氧化不充分或过度氧化, 有效成分含量不足, 需要重新换染液或者配制新染液。
2. 本方案染色后避免水洗, 用 95%的乙醇洗时也要迅速, 避免背景脱色。
3. 本方案染色随时间加长染色范围会逐渐变大, 须避免过染, 在染色 24 小时后, 可取出在显微镜下观察着色程度。
4. 染色也可以在 60℃染色 2-4 个小时替代室温过夜染色, 但是效果可能没有室温染色好。
5. 为了您的安全和健康, 请穿实验服并戴一次性手套操作。





## Mallory's Acid Hematoxylin (PTAH) Solution (Chemical Oxidation)

**Cat:** G1383

**Size:** 100mL

**Storage:** RT, avoid light, valid for 3 months.

### Introduction

Muscle fiber is a component of muscle tissue, which is composed of muscle cells. According to the morphological and functional characteristics, muscle fibers can be divided into smooth muscle (also known as striated muscle), skeletal muscle and cardiac muscle. There are many methods of muscle fiber staining, such as Ponceau method, Aniline Blue method, Hematoxylin Phosphotungstate method and so on.

Mallory's Acid Hematoxylin (PTAH) Solution (Chemical Oxidation) is a chemical ripening dye solution, which has better dyeing power in a short time and should not be stored for too long. Most of them are used to show the striae of striated muscle. This method is used to diagnose rhabdomyosarcoma. It can also be used to stain the inflammatory exudative cellulose, the capillary cellulose of DIC and neuropathology.

### Protocol(for reference only)

1. The tissue is recommended to be fixed in 10% formalin fixative or 4% PFA fixative, and conventional dehydration embedding.
2. Recommended paraffin section thickness 3-5 $\mu$ m, conventional dewaxing to distilled water.
3. (prepared by oneself) add the newly prepared PTAH oxidizing agent to cover the slice and oxidize it for 5min. Rinse with distilled water for 5-10s to remove excess reagents.
4. (Prepare by yourself) cover sections with oxalic acid solution and bleach for 1-2min. Rinse with tap water for 2min and balance with distilled water for 2min.
5. Immerse in Mallory's Acid Hematoxylin (PTAH) Solution (Chemical Oxidation) and dye (cover) for 24h~48h.
6. Remove the slices and wash away excess liquid directly with 95% ethanol.
7. Dehydrate with anhydrous ethanol for 30 s, transparent with xylene for 1min, and seal with resinene.

### Result

Cross-striations, fibrin, glial fibers, and nuclei	Deep Blue
Collagen Fiber, Cartilage Matrix	Brown Red
Coarse Elastic Fiber	Purple

### Note

1. If the horizontal lines displayed after dyeing are not blue enough or bright red, it means that the dyeing liquid is insufficient or excessive oxidation, and the active ingredient content is insufficient, and it is necessary to change the dyeing liquid or prepare a new dyeing liquid.
2. This scheme avoids washing after dyeing, and also washes with 95% ethanol quickly to avoid background decolorization.
3. The dyeing range of this scheme will gradually increase with time, so overstaining should be avoided. After 24 h of dyeing, the staining degree can be observed under a microscope.
4. Dyeing can also be done at 60°C for 2-4 h instead of overnight dyeing at room temperature, but the effect may not be as good as room temperature dyeing.
5. For your safety and health, please wear a lab coat and disposable gloves.

