

## 病毒包涵体染色液(亚甲蓝伊红法)

货号: G1910

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):亚甲蓝伊红染色液 | 50mL   | 2-8℃, 避光 |
| 试剂(B): Mann分化液 | 50mL   | 2-8℃, 避光 |

### 产品介绍:

病毒是一类体积极其微小, 能够通过滤菌器的只能在活细胞内生长增殖的微生物。病毒颗粒一般在 10~30nm, 主要由核酸和蛋白质组成。普通光镜下, 某些病毒感染的细胞内可见大小和数量不等的圆形或不规则小体, 称为病毒包涵体。该物质多位于细胞质内, 呈酸性, 如狂犬病毒包涵体; 有些位于细胞核内, 呈碱性, 如腺病毒核内包涵体; 有些既在细胞质内也在细胞核内, 如麻疹病毒包涵体。RNA 病毒常形成细胞质内包涵体, DNA 病毒多形成细胞核内包涵体。

病毒包涵体染色液采用 Mann 亚甲蓝伊红染色法, 细胞核被亚甲蓝染成蓝色, 包涵体被伊红染成红色。在病毒感染中, 包涵体可能是病毒增殖部位, 但应注意并非细胞内的所有包涵体都是病毒, 细胞变性也会形成包涵体。

### 自备材料:

10%中性福尔马林固定液、蒸馏水、系列乙醇

### 操作步骤: (仅供参考)

- 1、常规固定(常采用 10%福尔马林), 常规脱水包埋。
- 2、组织切片脱蜡入蒸馏水。
- 3、入亚甲蓝伊红染色液, 浸染 8-24h。蒸馏水洗 2 次。
- 4、Mann 分化液分化 20-30s。
- 5、丙酮脱水, 二甲苯透明, 中性树胶封固。

### 染色结果:

|     |    |
|-----|----|
| 包涵体 | 红色 |
| 细胞核 | 蓝色 |

### 注意事项:

- 1、病毒很小, 光镜下不易被发现, 应仔细观察。
- 2、为了您的安全和健康, 请穿实验服并戴一次性手套操作。

## Virus Inclusion Body Stain Kit (Methylene Blue and Eosin Method)

**Cat:** G1910

**Size:** 2×50mL

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

### Kit components

| Reagent                                  | 2×50mL | Storage           |
|--|--------|-------------------|
| Reagent(A):Methylene Blue-Eosin Solution | 50mL   | 2-8℃, avoid light |
| Reagent(B):Mann Differentiation Solution | 50mL   | 2-8℃, avoid light |

### Introduction

Virus is a kind of micro organism which can pass through the filter, only grow and proliferate in living cells. Virus particles are usually 10-30 nm, mainly composed of nucleic acids and proteins. Under ordinary light microscope, some virus infected cells can see round or irregular bodies with different sizes and numbers, which are called virus inclusions. Most of the substances are located in the cytoplasm and are acidic, such as rabies virus inclusion bodies; some are located in the nucleus and are alkaline, such as adenovirus inclusion bodies; some are both in the cytoplasm and in the nucleus, such as measles virus inclusion bodies. RNA viruses often form cytoplasmic inclusions, while DNA viruses often form nuclear inclusions.

The virus inclusion bodies staining uses Methylene Blue and Eosin Method. The nucleus is dyed blue by methylene blue, and the inclusion body is dyed red by eosin. In virus infection, the inclusion body may be the site of virus proliferation, but it should be noted that not all the inclusion bodies in cells are viruses, and cell degeneration will also form inclusion bodies.

### Self Provided Materials

10% Neutral formalin fixative, Distilled water, Series of ethanol

### Protocol(for reference only)

1. Conventional fixation (usually use 10% neutral formalin fixative), dehydration and embedding.
2. Dewax tissue slices into distilled water.
3. Add Methylene Blue-Eosin Solution and dye for 8-24 hs.
4. Wash twice with distilled water.
5. Differentiate by Mann Differentiation Solution for 20-30s.
6. Dehydrate by acetone, transparent by xylene, seal with resinene.

### Result

|                  |      |
|------------------|------|
| Inclusion Bodies | Red  |
| Nucleus          | Blue |

### Note

1. The virus is very small, which is not easy to be found under the light microscope, so it should be carefully observed.
2. For your safety and health, please wear experimental clothes and disposable gloves.