普鲁士蓝染色试剂盒（伊红法）

货号：G1424
规格：2×50mL/2×100mL
保存：室温，避光保存，有效期 1 年。

产品组成：

名称		2×50mL	2×100mL	保存
试剂（A）：Perls 染色工作液	A1：Perls 染色液 A	25mL	50mL	室温，避光
	A2：Perls 染色液 B	25mL	50mL	室温
临用前，取 A1、A2 等量混合，即为 Perls stain，不宜提前配制。				
试剂(B): 伊红染色液		50mL	100mL	室温，避光

产品介绍：

Perls 染色常用于显示局部组织内各种出血性病变，常见于吞噬细胞内。在判断含铁血黄素沉积时，用 Perls 反应可以得到证实，该染色方法可以很好的区分含铁血黄素和其他色素。该染色液稳定性好、可以长期保存、不易产生沉淀、应用范围广、可以进行复染。

普鲁士蓝染色试剂盒（Perls stain，伊红法），其复染液采用伊红染色液，伊红是常用的复染液，该复染液染色时间较核固红染色液要短。

操作步骤：*（仅供参考）*

（一）石蜡切片染色

1. 切片脱蜡至水

二甲苯两次，每次 5-10min，100%乙醇两次，每次 3-5min，95%、85%、75%乙醇 ，每级 3-5min，自来水或蒸馏水冲洗 1-3min 。

2. 染色

切片入 Perls 染色工作液（见注意事项 6）染色 15～30min ，蒸馏水充分冲洗 5～10min 。

伊红染色液淡染背景 15～30s，自来水快速冲洗 2～3s

3. 脱水、透明、封固

75%、85%、95%乙醇每级 3-5s，100%乙醇两次，每次 1min，二甲苯两次，每次 1-2min，中性树脂封片。

（二）冰冻切片染色

1. 无需脱蜡，直接迅速用蒸馏水冲洗 2～3min。
2. 染色、脱蜡、透明、封固步骤同石蜡切片的染色步骤，染色时间相应缩短。

（三）细胞染色

1. 4%多聚甲醛固定 10～20min。
2. 蒸馏水冲洗 2 次，每次 2min。
3. 染色、脱蜡、透明、封固步骤同石蜡切片的染色步骤。

染色结果：

含铁血黄素或三价铁	蓝色
细胞核、其他组织	红色

阴性对照

取相同连续切片脱蜡至水。置于 5%的草酸中，孵育 2-6h 后，经 Perla stain，需要步骤同上。结果为阴性。

注意事项：

1. 切片脱蜡应尽量干净。
2. 组织固定常采用 10%的中性福尔马林，经普通福尔马林长期固定后，组织会有损伤。

3. 临用前取 A1、A2 液等量混合，即为试剂（A），现配现用，不可提前配制。
4. 整个操作过程中容器要干净，避免使用金属铁制品，洗切片和容器时以蒸馏水为宜，因普通水内含铁质。
5. 避免使用酸性固定剂，铬酸盐处理也会妨碍铁的保存。
6. Perls stain 染色时，应根据样品情况调整着色时间。
7. 所有检查切片都应使用同一个阳性对照切片,选择适合的对照非常重要.尸检肺组织是一个很好的对照,包含相当数量的铁阳性巨噬细胞(心衰细胞).
8. 分级乙醇应经常更换新液.
9. 冰冻切片和细胞的染色,应根据具体情况摸索实验条件.
10. 为了您的健康和安全,请穿实验服并戴一次性手套操作.

Prussian Blue Iron Stain Kit (With Eosin Solution)

Cat: G1424
Size: 2×50mL/2×100mL
Storage: RT, avoid light, valid for 1 year.

Introduction

Perls Stain is often used to display various hemorrhagic lesions in local tissues, and it is common in phagocytes. Perls reaction can be used to determine the deposition of hemosiderin, and this staining method can distinguish hemosiderin from other pigments. The dyeing solution has good stability, can be preserved for a long time, is not easy to produce precipitation, has a wide range of applications, and can be used for re-dyeing.

In the Prussian Blue Iron Stain Kit (With Eosin Solution), eosin is used as the counterstain solution. Eosin is a common dye solution, and the dyeing time of this solution is shorter than that of nuclear fast red.

Kit Components

Reagent		2×50mL	2×100mL	Storage
Reagent(A): Perls Stain	A1：Perls Stain A	25mL	50mL	RT, avoid light
	A2：Perls Stain B	25mL	50mL	RT
Before use, mix equal parts of A1 and A2 to form Perls Stain. It is not suitable to prepare in advance.				
Reagent(B): Eosin Solution		50mL	100mL	RT, avoid light

Protocol(*for reference only*)

（一）For paraffin section staining

1. Dewax to distilled water
   Xylene twice each for 5-10min.100% ethanol twice each for 3-5min.
   95% , 85%, 75% ethanol each for 3-5min. Rinse in tap water or distilled water for 1-3min.
2. Stain
   Stain with Perls Stain(see note 4) for 15-30min.Rinse in distilled water for 5-10min.
   Light re-dyeing with Eosin Solution for 15-30s.Rinse quickly in tap water for 2-3s.
3. Dehydrate, transparent and seal
   75%, 85%, 95% ethanol each for 3-5s.
   100% ethanol twice each for 1min.
   Xylene twice each for 1-2min. Seal with resinene.

（二）For frozen section staining

1. Without dewaxing, rinse directly and quickly with distilled water for 2-3min.
2. Follow the other steps as paraffin sections.

（三）For cultured cell staining

1. Fix in 4% paraformaldehyde for 10-20min.
2. Rinse in distilled water twice for each time 2min.
3. The steps of staining, dehydration, transparency and sealing are the same as the steps of paraffin section. The time should be shortened accordingly.

Result

Hemosiderin or Ferric Iron	Blue
Nucleus and other Tissues	Red

Negative Control

Take the same adjacent section and dewax to water. After incubation in 5% oxalic acid for 2-6h, the procedure is the same as above. The result should be negative.

Note

1. Section dewaxing should be as clean as possible.
2. 10% neutral formalin is often used for tissue fixation. After long-term fixation with common formalin, tissue will be damaged. Avoid the use of acid fixatives, chromate treatment will also hinder the preservation of iron.
3. During the whole operation process, the container should be clean and avoid the use of metal iron products. When washing sections and containers, distilled water is suitable, because ordinary water contains iron.

4. When dyeing with Perls Stain, the time should be adjusted according to the sample situation.
5. All sections should use the same positive control section, so it is very important to select the appropriate control. Autopsy lung tissue is a good control, containing a considerable number of iron positive macrophages (heart failure cells).
6. Series of ethanol should be replaced frequently.
7. For the staining of frozen section and cell, should explore the experimental conditions according to the specific conditions.
8. For your health and safety, please wear the experimental clothes and disposable gloves.