

普鲁士蓝染色实验报告

一、实验器材及试剂

1、实验器材

名称	厂家	型号
脱水机	DIAPATH	Donatello
包埋机	武汉俊杰电子有限公司	JB-P5
病理切片机	上海徠卡仪器有限公司	RM2016
冻台	武汉俊杰电子有限公司	JB-L5
组织摊片机	浙江省金华市科迪仪器设备有限公司	KD-P
烤箱	天津市莱玻瑞仪器设备有限公司	GFL-230
载玻片	Wanwu	G6004
正置光学显微镜	日本尼康	NIKON ECLIPSE E100
成像系统	日本尼康	NIKON DS-U3

2、主要实验试剂

试剂名称	厂家	货号
无水乙醇	国药集团化学试剂有限公司	100092683
二甲苯	国药集团化学试剂有限公司	10023418
普鲁士蓝染液套装	Wanwu	G1029
中性树胶	国药集团化学试剂有限公司	10004160

二、实验步骤

- 1、石蜡切片脱蜡至水：**依次将切片放入二甲苯I20min-二甲苯II20min-无水乙醇I5min-无水乙醇II5min-75%酒精 5min，自来水洗，蒸馏水洗 3 遍。
- 2、普鲁士蓝染色：**将普鲁士蓝染液 A 和普鲁士蓝染液 B 等比例混合成普鲁士蓝染液，切片入染液中染色 1h，蒸馏水洗 2 遍。
- 3、染核：**普鲁士蓝染液 c 染色 3min，流水冲洗。
- 4、脱水封片：**切片依次放入无水乙醇I 5min -无水乙醇II 5min-无水乙醇III5min -二甲苯I5min-二甲苯II5min透明，中性树胶封片。

5、显微镜镜检，图像采集分析。

三、结果判读：

铁离子呈蓝色，细胞核红色。

四、注意事项：

- 1、普鲁士蓝染液要现配现用。
- 2、切片染色前用蒸馏水洗干净，防止自来水中的铁离子在染色中反应，造成假阳性。

Perls staining experimental report

1. Lab equipment and reagents

A. Lab equipment

Items	Manufacturer	Model
Dehydrator	DIAPATH	Donatello
Embedding machine	Wuhan Junjie Electronics Co., Ltd.	JB-P5
Pathology microtome	Shanghai Leica Instruments Co., Ltd.	RM2016
Frozen platform	Wuhan Junjie Electronics Co., Ltd.	JB-L5
Water Bath-Slide Drier	Zhejiang Jinhua Kedi Instrumental Equipment CO.,LTD	KD-P
Laboratory oven	Tianjin Labotery Instrument Equipment Co., Ltd.	GFL-230
Microscope slide	Wanwu	G6004
Upright optical microscope	Nikon Japan	Nikon Eclipse E100
Imaging system	Nikon Japan	NIKON DS-U3

B. Chemical Reagents

Items	Manufacturer	Model
Absolute alcohol	Sinopharm Chemical Reagent Co., Ltd.	100092683
Xylene	Sinopharm Chemical Reagent Co., Ltd.	10023418
Prussian blue staining kit	Wanwu	G1029
Neutral balsam	Sinopharm Chemical Reagent Co., Ltd.	10004160

2. Experimental steps

(1) Paraffin section deparaffinization and rehydration: put the slides into xylene I 20minutes-xylene II 20 minutes-absolute ethanol I 5 min-absolute ethanol II 5 min-75% alcohol for 5 min, then tap water washing and distilled water washing for 3 times.

(2) Prussian blue staining: mix Prussian blue staining solution A and Prussian blue staining solution B in equal proportions to Prussian blue staining solution, put the slides into staining solution staining for 1 hour, and wash twice with distilled water.

(3) Nucleus staining: Prussian blue staining solution C staining for 3 minutes, running water

washing.

(4) Dehydration and sealing: put the slides into absolute ethanol I 5min-absolute ethanol II 5min-absolute ethanol III 5min-xylene I 5min-xylene II 5min transparent, neutral balsam sealing.

(5) Microscope examination, image collection and analysis.

3. Results

The ferri ion is blue, and the nucleus is red.

4. Note

1. Prussian blue staining solution should be ready for usage.

2. Washing the slides with distilled water before staining to prevent the ferri ion in the tap water from reacting during staining process and causing false positive.