

## HE 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
染色机	DIAPATH	Giotto
烤箱	天津市莱玻璃仪器设备有限公司	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
HE 染液套装	Wanwu	G1003
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I 20min-二甲苯II 20min-无水乙醇I 5min-无水乙醇II 5min-75%酒精 5min，自来水洗。

2、苏木素染色：切片入苏木素染液染3-5min，自来水洗，分化液分化，自来水洗，返蓝液返蓝，流水冲洗。

3、伊红染色：切片依次入85%、95%的梯度酒精脱水各5min，入伊红染液中染色5min。

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III 5min -二甲苯I 5min-二甲苯II 5min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：

细胞核呈蓝色，细胞质呈红色。

### 四、注意事项：

- 1、注意细胞核的分化程度；
- 2、注意苏木素和伊红的效价，及时更换染液。

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## HE staining report

### 1 Apparatus and reagents

#### 1.1 Major apparatus

Name	Producer	Model
Dehydrator	DIAPATH	Donatello
Embedding machine	Wuhan Junjie Electronics Co., Ltd	JB-P5
Pathology slicer	Leica	RM2016
Frozen platform	Wuhan Junjie Electronics Co., Ltd	JB-L5
Organizer	KEDEE	KD-P
Dyeing machine	DIAPATH	Giotto
oven	Labotery	GFL-230
Glass slide	Wanwu	G6004
Upright optical microscope	Nikon	NIKON ECLIPSE E100
Imaging system	Nikon	NIKON DS-U3

#### 1.2 Major reagents

Name	Producer	Code
Ethanol	SCRC	100092683
Xylene	SCRC	10023418
HE dye solution set	Wanwu	G1003
Neutral gum	SCRC	10004160

### 2 Procedure

#### 2.1 Dewaxing as followed:

Xylene I for 20 min;  
Xylene II for 20 min;  
100% ethanol I for 5 min;  
100% ethanol II for 5 min;  
75% ethanol for 5 min;  
Rinsing with tap water ;

2.2 Stain sections with Hematoxylin solution for 3-5 min, rinse with tap water. Then treat the section with Hematoxylin Differentiation solution, rinse with tap water. Treat the section with Hematoxylin Scott Tap Bluing, rinse with tap water.

2.3 85% ethanol for 5 min; 95% ethanol for 5 min; Finally Stain sections with Eosin dye for 5 min.

#### 2.4 Dehydrate as followed:

100% ethanol I for 5 min;  
100% ethanol II for 5 min;  
100% ethanol III for 5 min;  
Xylene I for 5 min;  
Xylene II for 5 min;  
Finally seal with neutral gum.

2.5 Observe with microscope inspection, image acquisition and analysis.

### 3 Results

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Color	Result
Blue	Nucleus
Red	Cytoplasm

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### 4 Precautions

4.1 Pay attention to the degree of cell differentiation;

Pay attention to the potency of hematoxylin and eosin, and change the dyeing solution in time.