未脱钙骨硬组织切片 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
硬组织切片机	上海徕卡仪器有限公司	HistoCore AUTOCUT
组织摊片机	KEDEE	1 类
烤箱	天津市莱玻瑞仪器设备有限公司	GFL-230
载玻片	Wanwu	
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	Wanwu	G1005
分化液	Wanwu	G1005-3
返蓝液	Wanwu	G1005-4
中性树胶	国药集团化学试剂有限公司	10004160
乙二醇乙醚乙酸酯	麦克林	E808814-2.5L

二、实验步骤

1、切片脱塑至水：依次将切片乙二醇乙醚乙酸酯I 6 h，37℃，乙二醇乙醚乙酸酯II过夜，37℃，乙二醇乙醚乙酸酯III室温 10-15 min，乙二醇乙醚乙酸酯IV室温 10-15 min，100%I乙醇 10 min，100%II乙醇 10 min，95%乙醇 10 min，90%乙醇 10 min，80%乙醇 10 min，自来水洗。

2、苏木素染色：切片入苏木素染液染 8-10 min，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5 min，入伊红染液中染色8-10 min。

4、脱水封片：切片依次放入无水乙醇I 5 min，无水乙醇II 5 min，无水乙醇III 5 min，二甲I 5 min，二甲苯II 5 min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。

Undecalcified bone HE stain report

I. Experimental equipment and reagents

Equipment

Brand name	Manufactures	Model
Oven	Tianjin Leboree instrument equipment Co. Ltd	GFL-230
Microslide	Wanwu	
Optical Microscopy	NIKON	Nikon Eclipse E100
Imaging system	NIKON	Nikon DS-U3

Reagent

Reagent	Manufactures	Cat
Ethanol absolute	Sinopharm Chemical Reagent Co.,Ltd	100092183
Xylenes	Sinopharm Chemical Reagent Co.,Ltd	100023418
Hematoxylin-eosin staining	Wanwu	G1005
Differentiation liquid	Wanwu	G1005-3
Blue returning liquid	Wanwu	G1005-4
Neutral balsam	Sinopharm Chemical Reagent Co.,Ltd	10004160
Ethylene glycol ethyl ether acetate	Macklin	E808814-2.5L

II. Experiment procedure

1. Remove the embedding agent and rehydration

Put sections into ethylene glycol ethyl ether acetate I 6 h at 37 ℃ and ethylene ether acetate II overnight at 37 ℃. Then put them into ethylene glycol ethyl ether acetate III 10-15 minutes at room temperature and ethylene glycol ethyl ether acetateIV 10-15 minutes at room temperature. The sections were rehydrated in 100%I% - 100%II - 95% - 90% - 80% alcohol. Each step takes anywhere for 10 minutes. Finally， rinse with running water.

2. Hematoxylin staining

Put sections into the hematoxylin dyeing solution for 8-10 minutes, then washed with running water. Differentiated with differentiation liquid, then washed with running water. Use blue returning liquid to return blue.

3. Eosin staining

The sections were dehydrated with 85% and 95% ethanol absolute for 5 minutes respectively, and dyed in eosin solution for 8-10 minutes.

4. Transparent and Mounting

Put sections into three cylinders of ethanol absolute for 5 minutes and two cylinders of xylene for 5 minutes. Finally, sealed the sections with neutral balsam.

5. Microscope observation and collection and analysis images.

III. Result determination

The nucleus is blue and the cytoplasm is red.

IV. Matter need attention

1. Note the degree of differentiation of the nucleus.

2. Pay attention to the titer of hematoxylin and eosin and change the dye in time.