

未脱钙骨硬组织切片 VG 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
VG 染液套装	Wanwu	G1046
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°C, 乙二醇乙醚乙酸酯II过夜, 37°C, 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、配制 VG 染液：取 Van Gieson (VG) 染液 B 9 mL, 加入 Van Gieson (VG) 染液 A 1 mL 混匀；
- 3、VG 染液染 3 min, 快速水洗, 无水乙醇三缸快速脱水。
- 4、透明封片：干净的二甲苯透明1-5 min, 中性树胶封片。
- 5、显微镜镜检, 图像采集分析。

三、结果判读:

胶原纤维呈红色, 其他组织成分呈黄色。

四、注意事项:

1、水洗要快, 防止红色褪掉, 无水乙醇也要快脱, 防止黄色变暗。

Undecalcified bone VG stain report**I. Experimental equipment and reagent****Equipment**

Brand name	Manufactures	Model
Oven	Tianjin Labotery 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
VG staining solution	Wanwu	G1046
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 °C and ethylene ether acetate II overnight at 37 °C. 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. Prepare VG staining solution

Mixed with 9 ml of VG staining solution B and 1 mL of VG staining solution A.

3. Washed quickly after use VG staining solution stain for 1 minutes, and three cylinders of ethanol absolute rapidly dehydrate.

4. Then one cylinder of xylenes was used for transparency for 1-5 minutes. Finally, sealed the sections with neutral balsam.

8. Transparent and mount

Microscope observation and collection and analysis images.

III. Result determination

Collagen fibers are red and other tissue components are yellow.

IV. Matter need attention

1. Water should be washed quickly to prevent the red from fading, and ethanol should be removed quickly to prevent the yellow from darkening.