

未脱钙骨硬组织切片茜素红染色实验报告**一、实验器材及试剂****1、实验器材**

名称	厂家	型号
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
二甲苯	国药集团化学试剂有限公司	10023418
茜素红染液	Wanwu	G1038
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、茜素红染色: 切片用茜素红染液染 5-10 min, 自来水洗, 将切片放置烤箱内烤干。
- 3、透明封片: 切片入干净的二甲苯透明5 min, 中性树胶封片。
- 4、显微镜镜检, 图像采集分析。

三、结果判读:

钙盐沉积处呈深红色, 背景淡红色或者近无色。

Undecalcified bone alizarin Red 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
Alizarin Red staining solution	Wanwu	G1038
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 acetate IV 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. Alizarin Red staining

Put sections into alizarin red staining solution 5-10 minutes and wash with running water. Then place in the oven to drying.

3. Transparent and mount

Put sections into three cylinders of anhydrous ethanol for 5 min and two cylinders of xylene for 5 min. Finally, mount the sections with neutral balsam.

4. Microscope observation and collection and analysis images.**III. Result determination**



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Calcium salt deposits are crimson with a reddish background or near colorless.