

凯氏带染色实验报告

一、实验器材及试剂

1、实验器材

名称	厂家	型号
载玻片	wanwu	
盖玻片	江苏世泰实验器材有限公司	10127105P-G
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
脱水机	武汉俊杰电子有限公司	JJ-12J
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	天津市莱玻璃仪器设备有限公司	GFL-230

2. 实验试剂

试剂名称	厂家	货号
苯胺蓝	国药集团化学试剂有限公司	71003644
盐酸小檗碱	麦克林	B802465
中性树胶	国药集团化学试剂有限公司	10004160

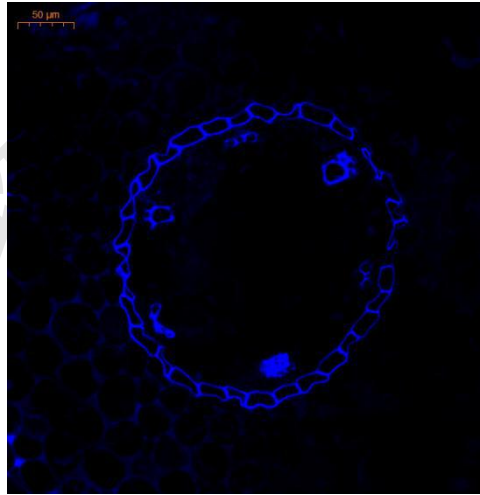
二、实验步骤

- 1、依次将切片放入二甲苯I 20 min-二甲苯II 20 min-无水乙醇I 5 min-无水乙醇II 5 min-75%酒精 5 min，自来水洗。
- 2、切片入 0.1%盐酸小檗碱染色液中避光染色 1 h，水洗 3-5 次，吸干水分，切片于 0.05% 苯胺蓝染色液中避光染色 30 min，水洗 3-5 次，吸干水分。
- 3、封片：滴加抗荧光淬灭封片液封片，盖盖玻片。
- 4、拍照：观察拍照，用荧光显微镜（DAPI 滤光片）观察凯氏带，荧光易淬灭，应尽快拍照，注意避光，切片可短暂保存于 4°C。

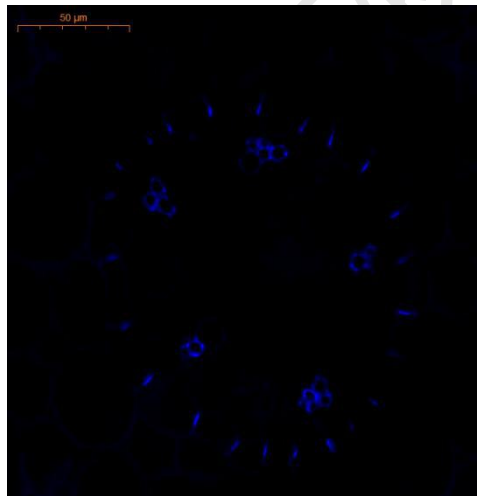
三、结果判读:

在内皮层细胞的上、下壁和径向壁上，凯氏带呈亮蓝色的带状结构环绕细胞一周。

例图



根 1 横切 凯氏带染色



根 2 横切 凯氏带染色

Experimental report of Caspary band staining

1 Apparatus and reagents

1.1 Major apparatus

Brand name	Manufactures	Model
Glass slide	wanwu	GFL-230
Cover glass	Jiangsu Shitai Experimental Equipment Co.,Ltd	10127105P-G
Upright optical microscope	Nikon	Nikon Eclipse E100
Imaging system	Nikon	Nikon DS-U3
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
oven	Labotery	GFL-230

1.2 Major reagents

Reagent	Manufactures	Cat
Aniline blue staining solution	wanwu	71003644
Berberine hydrochloride	Macklin	B802465
Neutral resin	Sinopharm Chemical Reagent Co.,Ltd	10004160

2. Experimental

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 Put the slides into 0.1% Berberine hydrochloride solution for 1 hour under dark conditions. Wash the slides with detergent for 3 times. Put the slides into 0.05% aniline blue solution for 30 min under dark conditions. Wash the slides with detergent for 3 to 5 times and the filter paper absorbs the excess liquid.

2.3 Seal: Drop anti-fluorescence quenching sealing film liquid sealing sheet, cover glass slide.

2.4 Take photos: observe and take photos. Observe the deposition of Caspary band with fluorescence microscope (DAPI filter). The fluorescence is easy to quench. Take photos as soon as possible and avoid light. The slices can be stored at 4 °C for a short time.

3. The results were as follows

On the upper, lower, and radial walls of the inner cortex cells, bright blue ribbons of The Caspary band encircle the cells.