石蜡切片制作实验报告

一、实验器材及试剂

1、实验器材

名称	厂家	型号
脱水机	常州市中威电子仪器有限公司	TSJ-SD
包埋机	常州市中威电子仪器有限公司	BMJ-A
组织包埋框	福建启盛实验设备科技有限公司	58444
石蜡	广东大川特种蜡有限公司	
病理切片机	赛默飞世尔科技有限公司	SHANDON FINESSE 325
冻台	武汉俊杰电子有限公司	JB-L5
组织摊片机	常州市中威电子仪器有限公司	PHY-III
防脱载玻片	湖北百奥斯生物科技有限公司	BP0510

2、主要试剂及货号

名称	厂家	型号
无水乙醇	国药集团化学试剂有限公司	100092683
环保透明剂	同声科技	

二、石蜡切片制作

1、取材：将新鲜组织用固定液固定 24h 以上。固定完成后，将组织从固定液中取出，在通风橱内用手术刀将目的部位组织修平整，将修切好的组织与带编号标签的包埋框一一对应，放入包埋框内。

2、水洗：将取好的组织放入自来水中，水洗 20 分钟。

3、脱水透明浸蜡：将装有组织的包埋框放入脱水机的吊篮里，于脱水机内依次梯度酒精进行脱水。75%酒精 2h，85%酒精 2h，95%酒精(1) 1h，95%酒精(2) 2h，无水乙醇(1) 1h，无水乙醇(2) 1h，二甲苯透明(1) 1h，二甲苯透明(2) 1h，融化石蜡(1) 1h，融化石蜡(2) 2h。

4、包埋：将浸好蜡的组织于包埋机内进行包埋。先将融化的蜡放入包埋底模内，待底模内的蜡稍凝固，将组织从包埋框内取出，按照包埋面的要求放入包埋底模，用镊子底部轻压组织，使组织完全平整的在底模内。将对应编号的包埋框盖在装有组织的底模上，轻轻移至-20℃冻台冷却，待蜡凝固后，将蜡块从底模中取出并修整蜡块。

5、切片：将修整好的蜡块置于石蜡切片机切片，厚 4μm。切片漂浮于摊片机 42℃温水上将组织展平，用载玻片将组织垂直捞起，待组织上的水稍沥干后，放入 60℃烤片机内烤片，烤片时间为 30min 至 2h，待水烤干蜡烤化后，取出常温保存备用。

百奥斯生物（长衍病理）

Experimental Report on Paraffin Sections

1. Instruments and key reagents

1.1 Instruments

Instrument	Manufacture	Specifications/Model
Tissue processor	Changzhou Zhongwei Electronics Co., Ltd	TSJ-SD
Tissue embedder	Changzhou Zhongwei Electronics Co., Ltd	BMJ-A
Embedding frame	Fujian Qisheng Experimental Equipment Technology Co., Ltd	58444
Microtome	ThermoFisher Scientific	SHANDON FINESSE 325
Paraffin	Guangdong Dachuan Special Wax Co., Ltd	
Freezing table	Wuhan Junjie Electronics Co., Ltd	JB-L5
Water bath - Slide drier	Changzhou Zhongwei Electronics Co., Ltd	PHY-III
Slide	Hubei BIOSSCI Biotech Co., Ltd	BP0510

1.2 Key reagents

Reagent	Manufacture	Specifications/Model
Ethanol	Sinopharm	100092683
Clearer	Wuhan Tongsheng Technology Development Co., Ltd	

2. Procedures

2.1 The fresh tissue was fixed with fix solution for more than 24 hours. The tissue was removed from the fix solution after fixation. Then, the tissue was smoothed by

using a scalpel in the fume hood and put into the embedding frame.

2.2 Washing: The tissue was put into tap water and washed for 20 minutes.

2.3 Tissue processing: Embedding frames containing tissue were put into the cassette and dehydrated with gradient ethanol in turn. In 75% ethanol for 2h, 85% ethanol for 2h, 95% ethanol(1) for 1h, 95% ethanol(2) for 2h, absolute ethanol(1) for 1h, absolute ethanol(2) for 1h, xylene(1) 1h, xylene(2) 1h, melted paraffin(1) 1h, melted paraffin(2) 1h.

2.4 Paraffin embedding: The wax-soaked tissue was embedded by using tissue embedder. Firstly, melted paraffin was put in the bottom of the embedded mold. Then, tissue was taken out of the embedding frame when the paraffin solidified slightly and put into embedded mold according to the requirements of the different section. Tweezers were used to gently press the tissue to make the tissue completely flat at the bottom of mold. Finally, the mold with tissue in it was covered by embedding frame with corresponding identifier and moved to the -20℃ freezing table for cooling. The paraffin block was taken out from the mold after paraffin solidified.

2.5 The trimmed paraffin block was put on the microtome to be sliced with 4μm thickness. Sections were floated on warm water (42℃) to be flatten and were picked up vertically by using a glass slide. After tissue was dried, sections were put into incubator at 60℃ for 30 minutes to 1 hour. Sections were taken out of the incubator and stored at room temperature.

3. Technical support

The technical support of paraffin section production is provided by Hubei BIOSSCI Biotech Co., Ltd (Wuhan Changyan Pathology technology Co., Ltd).

Tel: 400 118 0100

Fax: +86-027-87382710

E-mail: support@biossci.com

Website: www.biossci.com