

เอกสารอ้างอิง



ภาษาไทย

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กรุงเทพมหานคร : โรงพิมพ์จุฬาลงกรณ์มหาวิทยาลัย 2530

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ศูนย์วิทยาศาสตร์
จุฬาลงกรณ์มหาวิทยาลัย

ภาคผนวก

ศูนย์วิทยทรัพยากร อุปกรณ์ครุภัณฑ์วิทยาลัย

ภาคผนวก ก

ขั้นตอนการเตรียม solution สำหรับ perfusion

10% Formalin

Prepare for 1,000 ml solution

250 ml of 40% formalin +

750 ml of 0.1 M phosphate buffer pH 7.4

10% Sucrose

Prepare for 1,000 ml solution

100 gm of sucrose +

1000 ml of 0.1 M phosphate buffer pH 7.4

30% Sucrose

Prepare for 1,000 ml solution

30 gm of sucrose +

1000 ml of 0.1 M phosphate buffer pH 7.4

ภาคผนวก ๙

ขั้นตอนการเตรียม chrom - alum slide

1. Dip slides in 1:1 solution glacial acetic acid and 95% alcohol
2. Dip slides in distilled water
3. Dip slides in chrom-alum solution
4. Dry in oven (37° - 40° C) 2 - 3 hours

Chrom - alum solution

0.3 gm chromium potassium sulfate

3 gm gelatin

500 ml distilled water (hot)

ภาคผนวก C

ขั้นตอนการเตรียม block ชิ้นเนื้อ

1. จุ่มชิ้นเนื้อลงใน albumin - gelatin solution
2. วางชิ้นเนื้อในข้อ 1 ลงใน block กระดาษซึ่งเตรียมไว้
3. เท albumin - gelatin solution ลงไปใน block กระดาษให้ท่วมชิ้นเนื้อ
4. หยด 50% glutaraldehyde ลงไป 1-2 หยด เขย่าให้ท่วงจนเข้ม
5. แยก block ออก เพื่อนำไปตัดด้วยเครื่อง vibratome

Albumin - gelatin solution

18 gm albumin + 50 ml distilled water +
 0.3 gm gelatin + 10 ml distilled water (hot)

ภาคผนวก ๔

ขั้นตอนการเตรียม solution สำหรับ immunohistochemistry

1. 3% Normal rabbit serum : Normal rabbit serum 15 ul + 20% Triton - X 100 5 ul + 0.1 M phosphate buffer saline pH 7.4 500 ul
2. 1° Ab : Mouse anti calbindin - D28K dilution 1 : 500
Mouse anti calbindin - D28K 1 ul + 30% normal rabbit serum 500 ul
: Mouse anti parvalbumin dilution 1 : 4,000
Mouse anti parvalbumin 0.125 ul + 3% normal rabbit serum 500 ul
3. 2° Ab : 1:200
A biotinylated rabbit anti - mouse immunoglobulins 2.5 ul + 3% normal rabbit serum 500 ul
4. Streptavidin - biotinylated peroxidase complex : 1:100
Streptavidin - biotinylated peroxidase complex 50 ul + 0.1 M phosphate buffer saline pH 7.4 5 ml (fresh prepare)
5. 0.05% DAB : 3,3' diaminobenzidine tetrahydrochloride 25 mg + 0.2 M phosphate buffer saline pH 7.4 25 ml + distilled water 25 ml (fresh prepare)

0.1 M phosphate buffer pH 7.4

57.68 gm Na₂HPO₄. 2H₂O + 10.48 gm NaH₂PO₄. H₂O + 2,000 ml distilled water

0.2 M phosphate buffer pH 7.4

57.68 gm Na₂HPO₄. 2H₂O + 10.48 gm NaH₂PO₄. H₂O + 1,000 ml distilled water

ประวัติผู้เรียน

นางบังอร ฉางทรัพย์ เกิดวันที่ 14 เมษายน พ.ศ. 2507 ที่จังหวัด กรุงเทพฯ สำเร็จการศึกษาปริญญาตรีวิทยาศาสตร์บัณฑิต สาขาเทคนิคการแพทย์ คณะเทคนิคการแพทย์ มหาวิทยาลัยขอนแก่น ในปีการศึกษา 2529 และเข้าศึกษาต่อในหลักสูตรวิทยาศาสตร์มหาน้ำหนึ่ง- ทิพ สาขาวิทยาศาสตร์การแพทย์ คณะแพทยศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย เมื่อ พ.ศ. 2534 ปัจจุบันทำงานที่ ภาควิชาภาษาไทยวิภาคศาสตร์ คณะแพทยศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย



**ศูนย์วิทยทรัพยากร
อุปกรณ์ครุภัณฑ์**