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ภาคผนวก

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สารละลายและบัฟเฟอร์

1. 2% Agarose gel (w/v)

Agarose	1.6	g
1X TBE	80	ml

Dissolve by heating in microwave oven and occasional mix until no granules of agarose are visible.

2. 7.5 M Ammonium acetate (CH_3COONH_4)

Ammonium acetate	57.81	g	
Distilled water		80	ml

Adjust volume to 100 ml with distilled water and sterilize by autoclaving.

3. 0.5 M EDTA (pH 8)

Disodium ethylenediamine tetraacetate.$2H_2O$	186.12	g	

Dissolve in distilled water and adjust pH to 8.0 with NaOH

Distilled water to	1,000	ml

Sterilize the solution by autoclaving and store at room temperature.

4. Ethedium bromide

Ethedium bromide	10	mg
Distilled water	1	ml

Mix the solution and store at 4° C.

5. 6x loading dye

Bromphenol blue	0.25	g
Xylene cyanol	0.25	g
Glycerol	50	ml
1 M Tris (pH 8.0)	1	ml
Distilled water to	100	ml

Mixed and store at 4° C.

6. Lysis Buffer I

Sucrose		109.54	g
1.0 M Tris-HCl (pH 7.5)		10	ml
1.0 M $MgCl_2$		5	ml
Triton X –100 (pure)	10	ml	
Distilled water to		1,000	ml

Sterilize the solution by autoclaving and store at 4° C.

7. Lysis Buffer II

5.0 m NaCl	15	ml
0.5 M EDTA (pH 8.0)	48	ml
Distilled water to	1,000	ml

Sterilize the solution by autoclaving and store at room temperature.

8. 1.0 M $MgCl_2$ solution

Magnesium chloride.$6H_2O$	20.33	g
Distilled water to	100	ml

Dispense the solution into aliquot and sterilize by autoclaving.

9. 25:24:1 (v/v) Phenol-chloroform-isoamyl alcohol

Phenol	25	volume
Chloroform	24	volume
Isoamyl alcohol	1	volume

Mix the reagent and store in a sterile bottle kept in a refrigerater.

10. 5 M NaCl solution

Sodium chloride	29.25	g
Distilled water to	100	ml

Dispense the solution into aliquot and sterilize by autoclaving.

11. 20 mg/ml Proteinase K

Proteinase K	2	mg
Distilled water to	1	ml

Mix the solution and store at -20° C.

12. 10% SDS Solution

Sodium dodecyl sulfate	10	g
Distilled water to	100	ml

Mix the solution and store at room temperature.

13. 10X Tris borate buffer (10X TBE buffer)

Tris-base	108	g
Boric acid	55	g
0.5 M EDTA (pH 8.0)	40	ml

Adjust volume to 1,000 ml with distilled water. The solution was mixed and store at room temperature.

14. TE buffer

1.0 M Tris-HCl	5	ml
0.5 M EDTA	1	ml

Adjust volume to 500 ml with distilled water. The solution was mixed and store at room temperature.

15. 1.0 M Tris-HCl

Tris base	12.11	g

Dissolve in distilled water and adjusted pH to 7.5 with HCl

Distilled water to	100	ml

Sterilize the solution by autoclaving and store at room temperature.

ประวัติผู้เขียนวิทยานิพนธ์

นางสาวศิรประภา ทองกอบเพชร เกิดเมื่อวันที่ 2 กันยายน 2522 ที่โรงพยาบาลยาสูบ จังหวัดกรุงเทพฯ จบการศึกษาระดับปริญญาบัณฑิตปีการศึกษา 2543 จากคณะวิทยาศาสตร์ สาขาพันธุศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย หลังจากจบการศึกษาได้เข้าทำงานเป็นผู้ช่วยวิจัยที่หน่วยเวชพันธุศาสตร์และเมแทบอลิซึม ภาควิชากุมารเวชศาสตร์ คณะแพทยศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย เป็นระยะเวลา 1 ปี และตัดสินใจศึกษาต่อระดับปริญญามหาบัณฑิต คณะแพทยศาสตร์ สาขาวิทยาศาสตร์การแพทย์ จุฬาลงกรณ์มหาวิทยาลัย ในปีการศึกษา 2545

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