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APPENDICES

ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย

APPENDIX I

REAGENTS, MATERIALS AND INSTRUMENTS

A. MEDIA AND REAGENTS

Absolute ethanol	(Merck, Germany)
Acetone	(Merck, Germany)
Agarose (ultrapure)	(GIBCO BRL, U.S.A.)
Bromphenol blue	(Sigma, U.S.A.)
dNTPs	(Invitrogen, U.S.A.)
2-Mercaptoethanol	(Sigma, U.S.A.)
Bovine Serum Albumin	(Sigma, U.S.A.)
Ethylenediamine tetraacetic (EDTA)	(Amresco, U.S.A.)
Ethidium bromide	(Amresco, U.S.A.)
Fetal bovine serum (FBS)	(GIBCO BRL, U.S.A.)
FACS Permeabilizing solution with saponin	(Becton Dickinson, U.S.A.)
Gum tragacanth	(Sigma, U.S.A.)
L-glutamine	(Sigma, U.S.A.)
Medium 199 (M199)	(GIBCO BRL, U.S.A.)
Minimum Essential Medium	(GIBCO BRL, U.S.A.)
1 Kb Plus DNA Ladder	(Invitrogen, U.S.A.)
Paraformaldehyde	(Sigma, U.S.A.)
Penicillin	(Sigma, U.S.A.)
Periclinin chlorophyl protein-conjugated	
anti CD3 monoclonal antibodies (CD3/PerCP)	(Becton Dickinson, U.S.A.)
Potassium chloride (KCl)	(Merck, Germany)
Rabbit-anti HSV-1 antibody	(B114, DAKO A/S, Denmark)
Rabbit-anti HSV-2 antibody	(B116, DAKO A/S, Denmark)
RPMI 1640 (with L-glutamine)	(GIBCO BRL, U.S.A.)
Sodium Azide (NaN ₃)	(Sigma, U.S.A.)

Sodium chloride (NaCl)	(Merk, Germany)
Sodium hydrogencarbonate (NaHCO ₃)	(Merk, Germany)
Swine-anti rabbit antibody conjugated with FITC	(DAKO A/S, Denmark)
Streptomycin	(Sigma, U.S.A.)
Taq DNA polymerase (with MgCl ₂ and PCR buffer)	(GIBCO BRL, U.S.A.)
Tris-base	(Sigma, U.S.A.)
Trypsin	(Sigma, U.S.A.)

B. MATERIALS

Microcentrifuge tube	(SRS, U.S.A)
Polaroid film (no. 667)	(Berlijucker, U.S.A.)
Tissue culture flask	(Nunc, Denmark)
Tissue culture plate	(Nunc, Denmark)
12x75 mm polystyrene tubes with caps	(Becton Dickinson, U.S.A.)

C. INSTRUMENTS

Autoclave (model S-90N)	(Tomy seiko, Japan)
Chemi doc	(Bio-Rad, U.S.A.)
DNA thermocycle system	(Hybaid, England)
FACSort Flow cytometry with CELL QUEST software	(Becton Dickinson, U.S.A.)
Gelmate 2000 electrophoresis	(Toyobo, Japan)
Incubator type 80	(Memmert, Germany)
Microcentrifuge	(Fotodyne, U.S.A.)
Mixer-Vertex-Genic	(Scientific industries, U.S.A.)
Refrigerator	(Toshiba, Japan)
Water bath	(Julabo, Germany)

APPENDIX II

REAGENTS PREPARATION

REAGENTS AND MEDIA FOR CELL CULTURE

1. 10% M199 medium

2X M199 with Earle's salts, with L-glutamine, without NaHCO ₃	50	ml
1 M HEPES	1	ml
Pen/Strep. Antibiotic (10 ⁵ unit/ml)	0.1	ml
10% NaHCO ₃	1	ml
L-glutamine	1	ml
FBS	10	ml
DDW	46	ml
Stored at 4 °C		

2. 10% MEM

2X MEM with Earle's salts, with L-glutamine, without NaHCO ₃	50	ml
1 M HEPES	1	ml
Pen/Strep. Antibiotic (10 ⁵ unit/ml)	0.1	ml
10% NaHCO ₃	1	ml
L-glutamine	1	ml
FBS	10	ml
DDW	46	ml
Stored at 4 °C		

3. 1X RPMI 1640

RPMI 1640 with L-glutamine	10.4	g
NaHCO ₃	2	g
HEPES	2.383	g
DDW	1,000	ml

Sterilized by filtration and stored at 4 °C

4. 10% RPMI 1640

1X RPMI 1640 with L-glutamine	90	ml
FBS	10	ml
Pen/Strep. Antibiotic (10 ⁵ unit/ml)	0.1	ml

Stored at 4 °C

5. 10X PBS (phosphate-buffer saline)

NaCl	40	g
KCL	1	g
NaHPO ₄	5.75	g
KH ₂ PO ₄	1	g
DDW	300	ml

Adjusted to pH 7.4 and adjusted volume to 500 ml with DDW and

sterilized by autoclaving

6. 1X PBS

10X stock PBS	100	ml
DDW	900	ml

7. 10X Trypsin

Trypsin	0.5	g
EDTA	0.2	g
NaCl	9.0	g
DDW	100	ml

Sterilized by filtration and stored at -20 °C

8. 1X Trypsin

10X stock trypsin	10	ml
DDW	90	ml
Store at 4 °C		

9. Plaque overlay medium

Solution A

10X M199 with Earle's salts, with L-glutamine, without NaHCO ₃	20	ml
FBS	20	ml
1 M HEPES	2	ml
Pen/Strep. Antibiotic (10 ⁵ unit/ml)	0.2	ml
10% NaHCO ₃	3	ml
L-glutamine	2	ml
DDW	42	ml

Solution B

Gum tragacanth	1.6	g
DDW	100	ml

Solution A and B were mixed at the ratio 1:1 before use.

REAGENTS FOR FLOW CYTOMETRY

1. Washed buffer

BSA	5	g
NaN ₃	1	g
1X PBS	1,000	ml
Store at 4°C		

2. FACS Permeabilizing solution (1X)

10X stock FACS Permeabilizing solution
 Dilute 1:10 with DDW only
 Can be stored at RT for one month and at 4°C for one year

REAGENTS FOR PCR AND ELECTROPHORESIS

1. 5X Tris-borate buffer (TBE)

Tris-base	54	g
Boric acid	27.5	g
5M EDTA, pH 8.0	20	ml
Sterilized by autoclaving		

2. Ethidium bromide (10 mg/ml)

Ethidium bromide	1	g
Sterile distilled water	100	ml

3. Loading dye

Bromphenol blue	0.25	g
Xylene cyanol FF	0.25	g
Glycerol	30	ml
DDW	69.5	ml

4. 1% Agarose gel

Agarose ultrapure	0.4	g
0.5X TBE buffer	40	ml

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BIOGRAPHY

Miss. Phattamawan Chimma was born on July 8, 1975 in Nakornratchasima, Thailand. She previously graduated with the Bachelor degree of Science in Microbiology from the Faculty of Science, Chulalongkorn University in 1997.

