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APPENDIX

APPENDIX A

Reagent, Materials, and Instruments

A. Media and Reagents

Absolute ethanol	(Merck, Germany)
Agarose (ultrapure)	(Merck, Germany)
Alkaline phosphatase substrate	(Bio Rad Labs., Hercules, CA)
Anti-IFN-γ mAb 1-D1K	(Mabtech, Stockholm, Sweden)
Anti-IFN-γ mAb 7-B6-1	(Mabtech, Stockholm, Sweden)
DMSO	(Sigma, UK)
dNTPs	(Invitrogen, U.S.A.)
EDTA	(Amreso, U.S.A.)
Ethydium bromide	(Amreso, U.S.A.)
Fetal Bovine Serum	(Bio Whittaker, Maryland, USA)
Glutamine	(Sigma, UK)
Isoprep	(Robbins Scientific, Norway)
PBS	(Sigma, UK)
Penicillin	(General Drugs House, Thailand)
RPMI medium 1640	(GIBCO, USA)
Streptavidin-alkaline phosphatase conjugate	(Mabtech, Stockholm, Sweden)
Peptide	(Minotope, Australia)
Trypan blue	(Sigma, UK)

B. Materials

Centrifuge tube	(Corning, U.S.A.)
Disposable serological pipette	(Costar, U.S.A.)
ELISpot plate	(Millipore, U.S.A.)
Filter Tip	(Sorenson, U.S.A.)

Microcentrifuge tube	(Sorenson, U.S.A.)
Tissue culture plate	(IWAKI, Japan)

C. Instruments

Autoclave (model-SS-325)	(Tomy, Japan)
Chemi doc	(Bio-Rad, U.S.A.)
CO_2 Incubator	(Thermo Forma, U.S.A.)
DNA thermocycle system	(Hybaid, U.S.A.)
Electrophoresis chamber	(CBS, U.S.A.)
Microcentrifuge	(Fotodyne, U.S.A.)
Mixer-Vertex-Genic	(Scientific industries, U.S.A.)
Power supply (Model 1000/500)	(Bio-Rad, U.S.A.)
Refrigerator	(Toshiba, Japan)
Spectrophotometer (SmartSpect™ 3000)	(Bio-Rad, U.S.A.)
Vertical electrophoresis chamber	(CBS, U.S.A.)
Water bath	(Julabo, Germany)

APPENDIX B

REAGENTS PREPARATION

Reagents for molecular analysis

1. TE buffer (Tris/EDTA)

Tris, PH 7.4	10	mM
EDTA, pH 8.0	1	mM

2. 10 mg/ml Ethidium bromide

Ethidium bromide	1.0	g
Distilled water	100	ml

Mix the solution and sore in the dark at 4°C.

3. 1.5% Agarose gel

Agarose	0.525	g
1x TBE	35	ml

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

Reagents for CTL analysis

1. Ficoll-Hypaque solution (ready to use)

2. RPMI medium 1640 (ready to use)

3. Penicillin 10,000 Units/ml

3.1 Stock penicillin 100,000 Units/ml

Penicillin G 1,000,000 Units per ampoule was reconstituted with sterile DW 10 ml and mixed

a. Working penicillin 10,000 Units/ml

Stock penicillin 100,000 Units/ml	1	ml
RPMI1640	9	ml

4. Streptomycin 10,000 µg/ml

4.1 Stock streptomycin 100,000 µg/ml

Streptomycin 1 gm was reconstituted with sterile DW 10 ml and mixed

4.2 Working streptomycin 10,000 Units/ml

Stock streptomycin 100,000 Units/ml	1	ml
RPMI1640	9	ml

5. Reagent for culture

4.1 R10

RPMI1640+100 Units/ml Streptomycin	90	ml
Fetal Bovine Serum (FBS)	10	ml

4.2 R20

RPMI1640+100 Units/ml Streptomycin	80	ml
Fetal Bovine Serum (FBS)	20	ml

6. Cyclosporin A 1 µg/ml

5.1 Stock CSA 1 mg/ml

CSA 50 mg/ml	100	µl
Normal Saline Sterile	4900	µl

5.2 Stock CSA 10^{-4} g/ml

Stock CSA 1 mg/ml	100	µl
R20	900	µl

5.3 CSA 1 µg/ml

Stock CSA 10^{-4} g/ml	100	µl
R20	900	µl

7. Peptide preparation

6.1 Stock peptide 1 mg/ml

Peptide	1	mg
1% DMSO in PBS	1	ml

6.2 Peptide 200 µg/ml

Stock peptide 1 mg/ml	200	µl
Sterile PBS	800	µl

APPENDIX C

AMINO ACID

1. Abbreviation for amino acids

A	alanine	L	leucine
R	arginine	K	lysine
N	asparagines	M	methionine
D	aspartic acid	F	phenylalanine
C	cysteine	P	praline
Q	glutamine	S	serine
E	glutamine	T	threonine
G	glycine	W	trytophan
H	histidine	Y	tyrosine
I	isoleucine	V	valine

BIOGRAPHY

Miss Sasiporn Ruangdachsuwan was born on July 23, 1980 in Chachoengsao province, Thailand. She previously graduated with the Bachelor degree of Science in Microbiology from Burapha University in 2001 and then attends to particulate in Medical Microbiology program, Graduate School, Chulalongkorn University for her master degree.