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APPENDICES

Appendix 1 Preparation of stacking gel and separating (running) gel

Composition	Running gel (10%)		Stacking gel	
	1 plate	2 plate	1 plate	2 plate
30%Acrylamide mix	3.3 ml	9.9 ml	0.65 ml	1.95 ml
1 M Running gel buffer	3.75 ml	11.25 ml		
1 M Stacking gel buffer			0.625 ml	1.875 ml
Distilled water	2.75 ml	8.25 ml	3.28 ml	9.84 ml
10% SDS	100 µl	300 µl	50 µl	150 µl
10% APS	100 µl	300 µl	37.5 µl	112.5 µl
TEMED	10 µl	30 µl	5 µl	15 µl
Total volume	10 ml	30 ml	4.6 ml	13.9 ml

*Running gel buffer: 1 M Trizma pre-set crystal, pH 8.8

Stacking gel buffer: 1 M Tris-base, pH 6.8

Appendix 2 Gel staining solution and destain solution

Gel staining solution

Methanol	45.5 ml.
Acetic acid	9 ml.
Coomassie brilliant blue 250 (R)	0.05 g.
Distilled water	45.45 ml.

Bath gels and leave on the shaker for 1 hour

Destain solution

Methanol	10 ml.
Acetic acid	10 ml.
Distilled water	80 ml.

Destaining gels on the shaker for 2 hours

Appendix 3 List of antibodies For Western blot analysis

Antibody	Supplier	Animal raised in/ poly- or monoclonal species cross reactivity	Concentration of primary antibody and incubation time	Concentration of secondary antibody and incubation time	Blocking solution	Apparent molecular weight (kDa)	Protein loading (μg)
ERK-P	Santa Cruz	rabbit polyclonal rat	1:500 overnight 4°C	1:5000 2 hours RT*	10% milk	42,44	10
ERK-T	Santa Cruz	rabbit polyclonal rat	1:5000 overnight 4°C	1:5000 2 hours RT	10% milk	42,44	10
JNK-P (detect JNK1,2,3)	Santa Cruz	rabbit polyclonal rat	1:500 overnight 4°C	1:5000 2 hours RT	5% milk	46,54/56	20
JNK-T (detect JNK1,2,3)	Santa Cruz	rabbit polyclonal rat	1:1000 overnight 4°C	1:5000 2 hours RT	5% milk	46,54/56	20

Antibody	Supplier	Animal raised in/ poly- or monoclonal species cross reactivity	Concentration of primary antibody and incubation time	Concentration of secondary antibody and incubation time	Blocking solution	Apparent molecular weight (kDa)	Protein loading (μg)
p38-P (detect p38α,β,γ)	Biosource	rabbit polyclonal rat	1:1000 overnight 4°C	1:5000 2 hours RT	5% milk	38	20
p38-T	Cell signaling	rabbit polyclonal rat	1:1000 overnight 4°C	1:5000 2 hours RT	5% milk	38	20

* RT = Room temperature

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Miss Natthapaninee Thanomsridetchai was born in Bangkok, the capital city of Thailand, in April 18th, 1981. In 2003, She received her bachelor degree in Medical Technology from Faculty of Allied Health Sciences, Chulalongkorn University.