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APPENDICES

APPENDIX A

BUFFERS AND REAGENT

1. 10X Tris borate buffer (10X TBE buffer)

Tris – base	100	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.

2. 6X loading dye

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

Mixed and stored at 4⁰C

3. 2% Agarose gel (w/v)

Agarose	2.0	g
1X TBE	100	ml

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

4. Ethidium bromide

Ethidium bromide	10	mg
Distilled water	1	ml

Mix the solution and store at 4⁰C

5. Phosphate-Buffered Saline (PBS) 1 liter

Solution A

NaCl	8.0	g
KCl	0.2	g

CaCl ₂ ·2H ₂ O	0.132 g
MgCl ₂ ·6H ₂ O	0.1 g
Distilled water	800 ml

Solution B

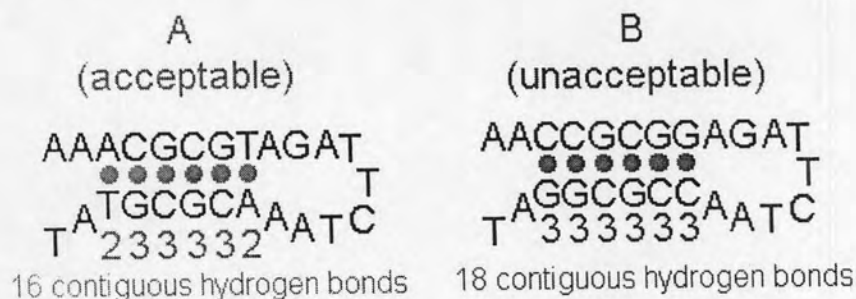
Na ₂ HPO ₄	1.15 g
KH ₂ PO ₄	0.2 g
Distilled water	800 ml

Dissolve each solution in demineralized water. Autoclave solutions A and B separately at 15 pounds for 15 minutes. Mix A and B when cold: stir slowly; final pH 7.0 and store at 4°C.

APPENDIX B

Designing and storing correct-splicing AMOs(see also www.gene-tools.com)

1. Select a target sequence
2. Make sure the selected sequence has little or no self-complementary: The selected Morpholino oligo should form no more than 16 contiguous intrastrand hydrogen bonds



3. A 25-base Morpholino oligo will likely have poor water solubility if it contains more than 9 total guanines (>36% G) or more than 3 contiguous guanines.
4. It is wise to carry out a BLAST search using the proposed sequence to confirm that it, or a similar sequence, is not present elsewhere in the genome of the species under study.
5. AMOs should be stored in aliquots at -20°C. They can be heated to 65°C and then put on the ice prior to use. The concentration of a dissolved AMOs can be calculated by measuring its absorbance at 265nm in 0.1 N HCl and dividing by ϵ , the molar absorbance provided on the MO product information sheet

BIOGRAPHY

Miss Natthakorn Rattanachartnarong was born in Bangkok, the capital city of Thailand, in September 2nd, 1984. In 2007, I received my bachelor degree in Biology from Faculty of Science, Srinakariwirot University. Consequently, with my interests in Human and Molecular Genetics, I had made a decision to study in curriculum of Medical Science in Faculty of Medicine for my Master degree.