APPENDIX E

Reagents for agarose gel electrophoresis

1. Gel loading buffer (DNA loading Dye)

The loading dye buffer composed of 0.25% bromphenol blue, 0.25% xylene cyanol, 30% glycerol and 35 ml of UDW. The loading dye solution was kept at 4^{o}C.

2. Tris acetate buffer (50x TAE)

The stock 50× TAE was prepared by dissolving 242 grams of Tris-base in 500 ml of distilled water. After the ingradient was completely dissolved, 57.1 ml of concentrate glacial acetic acid and 100 ml of 0.5 M EDTA, pH 8.0, were added into the solution. The final volume was adjusted to 1,000 ml by distilled water. The 50x TAE was stored at room temperature. The 1× working solution was freashy prepared.

3. Tris borate buffer (5× TBE)

The stock 5x TBE was prepared by dissolving 52 grams of Tris-base in 500 ml of distilled water. After the ingradient was completely dissolved, 27.5 g of boric acid and 4.65 g of disodium EDTA.2H_2O were added into the solution. The volume was adjusted to 1,000 ml by distilled water. The 5× TBE was stored at room temperature. The 0.5× working solution was freshy prepared by diluting the stock 5× buffer with distilled water.

4. Ethedium bromide

The stock solution was prepared by dissolving 100 mg ethidium bromide (Sigma Chemical Co., USA) in 10 ml of DW. The solution was stored in the dark.

For working solution, 20 µl of stock ethidium bromide were diluted in 400 ml of DW to make working solution 0.5 µg/ml