APPENDIX F

Reagents for T7 phage biopanning

1. LB broth

Twenty five grams of LB broth powder (Difco Laboratory, Detroit, Michigan, USA) were dissolved in 1,000 ml of distilled water by heating and sterilized by autoclaving at 151 lb/inch^2, at 121^{o}C for 15 min. The medium was cooled to 50^{o}C and kept at 4^{o}C.

2. LB agar

Ten grams of tryptone (Himedia, India), 5 g of yeast extract, 5 g of NaCl and 10 g of agarose were dissolved in 100 ml of distilled water. The medium was sterilized by autoclaving at 151 lb/inch^2, at 121^{o}C for 15 min. The agar was poured onto petri dishes. The agar plates were kept at 4^{o}C.

3. LB top agar

Ten g of Tryptone, 0.5 g of yeast extract, 0.5 g of NaCl and 0.6 g of agarose were dissolved in 100 ml of distilled water. The medium was sterilized by autoclaving. The medium was kept at 4^{o}C.

4. Elution buffer (1% SDS solution)

The solution was prepared by dissolving ten g of sodium dodecyl/lauryl sulfate in one liter of distilled water.

5. Coating buffer (Carbonate-bicarbonate buffer, pH 9.6)

The buffer was prepared by dissolving 1.26 g of $NaHCO_3$ in 300 ml of distilled water, then the pH was adjusted to 9.6 with 0.5 M Na_2CO_3 (0.53 g in 100 ml of distilled water).

6. Phosphate buffered saline (0.01 M PBS, pH 7.4)

The solution was prepared by dissolving 1.216 g of anhydrous Na_2HPO_4, 0.17 g of anhydrous NaH_2PO_4 and 8.766 g of NaCl in one liter of distilled water. The pH of this solution was adjusted to 7.4 with 1 N HCl.

7. Washing solution (PBS-T)

Washing solution (PBS-T) was prepared by mixing Tween-20 in PBS, pH 7.4 to 0.05% concentration.

8. Blocking solution

The solution was prepared by dissolving one g of BSA in 100 ml of 0.01 M PBS.