

Appendix A

Chemical Reagents

1. Dioscorealide B standard

Stock standard; 1 mg of dioscorealide B dissolve in 1 ml acetonitrile (1000 µg/ml). This solution is dilute to a series of mix working standard solutions of dioscorealide B are 12.5-200 µg/ml.

2. 1% Acetic acid

10 ml of glacial acetic acid dissolve and make up to 1000 ml DI water

3. Dulbecco's modified eagle medium (DMEM)

13.4 g of Dulbecco's modified eagle powder medium is dissolve in 500 ml distilled water. Add 3.7 g of sodium bicarbonate and dilute to 1000 ml with distilled water. Adjust pH to 7.2-7.4 with 1 N sodium hydroxide or 1 N hydrochloric acid and filter through 0.2 micron membrane filter and keep in sterile bottle.

The complete media is mixture of 400 ml of Dulbecco's modified eagle medium (DMEM), 40 ml fetal bovine serum and 4 ml penicillin/ streptomycin.

4. 10% Hydrochloric acid (HCl)

270.27 ml concentrated hydrochloric acid (37%) dissolve and make up to 1000 ml DI water

5. Phosphate buffer saline (PBS)

1 tablet of PBS dissolves and makes up to 100 ml DI water

6. 50 mM Sodium hydroxide (NaOH)

0.2 g of sodium hydroxide dissolves in 100 ml DI water

7. 0.4% Sulforhodamine B (SRB)

0.4 g sulforhodamine B dissolve and make up to 100 ml 1% acetic acid (protect light)

8. 40% Trichloroacetic acid (TCA)

40 g trichloroacetic acid dissolves and makes up to 100 ml DI water

9. 10 mM Tris buffer (pH 10)

0.121 g Tris Hydroxymethylaminoethane dissolves in 50 ml DI water and adjusts pH to 10 with 1 N hydrochloric acid.