

Solutions:

1. SOB Media:

2% Bactotryptone
0.5% Yeast extract
10 mM NaCl
2.5 mM KCl
10 mM MgCl₂
10 mM MgSO₄
1.5% Agar (for plates)

2. SOC Media:

SOB + 20 mM Glucose

3. X-gal:

Dissolve 100 mg of X-gal in 5 ml of dimethylformamide in a sterile polypropylene tube. Aliquot 1 ml into eppendorf tubes wrapped in foil (to prevent damage by light) and store at -20 degrees C. It is not necessary to filter sterilize X-gal solutions.

4. IPTG:

Dissolve 2 g of IPTG in 8 ml of dH₂O in a sterile polypropylene tube. Adjust the volume to 10 ml with dH₂O and filter through a 0.22 micron syringe filter into 1 ml aliquots and store at -20 degrees C.

5. 10X PBS: for 1L

80 g NaCl
2 g KCl
14.4 g Na₂HPO₄
2.4 g KH₂PO₄
in 800 mL dH₂O
pH to 7.4 with HCl and autoclave

6. 50X TAE: for 1L

242 g Tris Base
57.1 mL glacial acetic acid
100 mL of 0.5 M EDTA, pH 8.0

7. 20X SSC: For 1L

175.3 g NaCl
88.2g Sodium Citrate.2H₂O
pH to 7

8. TE:

10 mM Tris, pH 8
1 mM EDTA