

Terrific Broth

(Tartof and Hobbs 1987)

Per liter:

To 900 ml of deionized H₂O, add:

bacto-tryptone 12 g

bacto-yeast extract 24 g

glycerol 4 ml

Shake until the solutes have dissolved and sterilize by autoclaving for 20 minutes at 15 lb/sq. in. on liquid cycle.

Allow the solution to cool to 60°C or less, and then add 100 ml of a sterile solution of 0.17 M KH₂PO₄, 0.72 M K₂HPO₄. (This solution is made by dissolving 2.31 g of KH₂PO₄ and 12.54 g of K₂HPO₄ in 90 ml of deionized H₂O. After the salts have dissolved, adjust the volume of the solution to 100 ml with deionized H₂O and sterilize by autoclaving for 20 minutes at 15 lb/sq. in. on liquid cycle.)

SOB Medium

Per liter:

To 950 ml of deionized H₂O, add:

bacto-tryptone 20 g

bacto-yeast extract 5 g

NaCl 0.5 g

Shake until the solutes have dissolved. Add 10 ml of a 250 mM solution of KCl. (This solution is made by dissolving 1.86 g of KCl in 100 ml of deionized H₂O.) Adjust the pH to 7.0 with 5 N NaOH (~0.2 ml). Adjust the volume of the solution to 1 liter with deionized H₂O. Sterilize by autoclaving for 20 minutes at 15 lb/sq. in. on liquid cycle.

Just before use, add 5 ml of a sterile solution of 2 M MgCl₂. (This solution is made by dissolving 19 g of MgCl₂ in 90 ml of deionized H₂O. Adjust the volume of the solution to 100 ml with deionized H₂O and sterilize by autoclaving for 20 minutes at 15 lb/sq. in. on liquid cycle.)

SOC Medium

SOC medium is identical to SOB medium, except that it contains 20 mM glucose. After the SOB medium has been autoclaved, allow it to cool to 60°C or less and then add 20 ml of a sterile 1 M solution of glucose. (This solution is made by dissolving 18 g of glucose in 90 ml of deionized H₂O. After the sugar has dissolved, adjust the volume of the solution to 100 ml with deionized H₂O and sterilize by filtration through a 0.22-micron filter.)