

A. LB media (Luria-Bertani media)

Per liter:

5 g	yeast extract
10 g	tryptone (or peptone)
10 g	NaCl

Add the reagents to app. 900 mL distilled water in a measuring cylinder. Shake until all is dissolved. Adjust the final volume to 1 L using distilled H₂O. Sterilize by autoclaving on wet cycle (20 min at 15 psi = 1.02 atm).

B. 2xTY media (*E. coli* rich media)

Per liter:

10 g	yeast extract
16 g	tryptone (or peptone)
5 g	NaCl

Add the reagents to app. 900 mL distilled water in a measuring cylinder. Shake/stir until dissolved. Adjust the final volume to 1 L using distilled H₂O. Sterilize by autoclaving on wet cycle (20 min at 15 psi = 1.02 atm).

C. Terrific Broth To make 1 liter

Component

Bacto-tryptone	12g
Bacto-yeast extract	24g
Glycerol	4ml

Add distilled water to the reagents to make 900 ml in a measuring cylinder. Mix until all material is dissolved. Autoclave, then add 100 mL sterile potassium phosphate mix (for 100 mM phosphate):

Component

1 M KH ₂ PO ₄	20 mL
1 M K ₂ HPO ₄	80 mL

After autoclaving, **1 mL/liter** of this metal mix can be added, as needed.

1000x metals mix (100 ml in ~50 mM HCl)

1. Make 50 ml of 0.1 M FeCl₃-6H₂O (FW: 270.30) by dissolving the salt in ~0.1 M HCl (a 100-fold dilution of conc HCl).

2. Add together:

1 ml 1 M MnCl₂ - 4H₂O (FW: 197.91)

1 ml 1 M ZnSO₄ - 7H₂O (FW: 287.56)

1 ml 0.2 M CoCl₂ - 6H₂O (FW: 237.95)

1 ml 0.2 M NiCl₂ - 6H₂O (FW: 237.72)

46 ml distilled water

Filter sterilize

Mix the FeCl₃ stock (50 mL) with the sterilized metals solution (50 mL) to make a 100 mL of **1000x metals mix** in ~50 mM HCl. The final concentrations in 1000-fold dilution are: 50 μM Fe, 10 μM Mn, 10 μM Zn, 2 μM Ni, 2 μM Co. This solution was stored at room temperature. Upon prolonged storage, small amounts of precipitate formed in the mixture.