E. coli growth media

LB:

For 1 L

- 10 g tryptone
- 5 g yeast extract
- 10 g NaCl
- Optional: Bring up the volume to around 900 mL with ddH₂O, then adjust the pH to 7.4
- Bring up the volume to 1 L with ddH₂O
- Sterilize by autoclaving for 30 min

To make LB-agar, add 15 g of agar prior to autoclaving

Low-salt LB:

For 1 L

- 10 g tryptone
- 5 g yeast extract
- 5 g NaCl
- Optional: Bring up the volume to around 900 mL with ddH₂O, then adjust the pH to 7.4
- Bring up the volume to 1 L with ddH₂O
- Sterilize by autoclaving for 30 min

To make low-salt LB-agar, add 15 g of agar prior to autoclaving

SOC:

For 1 L

- 20 g tryptone
- 5 g yeast extract
- 0.5 g NaCl
- 0.186 g KCl
- 0.952 g MgCl₂
- Bring up the volume to around 900 mL with ddH₂O, then adjust the pH to 7.4 with 10 N NaOH
- Bring up the volume to 1 L with ddH₂O
- Sterilize by autoclaving for 30 min
- Add 20 mL of sterile 1 M glucose immediately before use

1 M glucose:

For 100 mL

- Dissolve 18 g glucose in 100 mL ddH₂O
- Sterilize by filtering through 0.2 μ or by autoclaving for 15 min

Antibiotic stocks

Ampicillin (1000x):

- Dissolve 5 g ampicillin in 25 mL ddH₂O
- Add 25 mL absolute ethanol
- Store at -20 °C

Carbenicillin (1000x for liquid media, 2000x for plates):

- Dissolve 2.5 g carbenicillin in 25 mL ddH₂O
- Add 25 mL absolute ethanol
- Store at -20 °C

Chloramphenicol (1000x):

- Dissolve 1.7 g chloramphenicol in 50 mL absolute ethanol
- Store at -20 °C

Kanamycin (1000x, but 250x for autoinduction media):

- Dissolve 1.25 g ampicillin in 50 mL ddH₂O
- Sterilize by filtering through 0.2 μ
- Store at -20 °C in 1.5-mL aliquots

Tetracycline (1000x):

- Dissolve 0.75 g tetracycline in 50 mL absolute ethanol or isopropanol
- Store at -20 °C in 1.5-mL aliquots