

LB agar recipe

The recipe below is used to prepare a 500 mL LB agar solution. This amount will be enough to make approximately 20 - 30 plates.

Reagent	Mass / Volume
Agar	7.5 grams
Tryptone	5 grams
NaCl	5 grams
Yeast extract	2.5 grams
Distilled water	Up to 500 mL

How to make LB agar plates

1. Weigh out 7.5 g agar, 5 g tryptone, 5 g sodium chloride (NaCl) and 2.5 g yeast extract and add to a 1 L Duran bottle.
2. Measure out approximately 400 mL of distilled water and add to the Duran bottle.
3. Shake the bottle to dissolve the reagents.
4. Once the reagents have fully dissolved, adjust the pH to 7.0 by using sodium hydroxide (NaOH) solution (1 N).
5. Once the pH is adjusted, top up the solution to 500 mL by using distilled water.

Optional: set a water bath to 55°C.

6. To sterilise, autoclave the solution on a liquid cycle (20 min at 15 psi).
7. Leave the solution to cool to approximately 55°C, or warm enough to be held in your hand without burning it.

If you do not have enough time to keep an eye on the temperature, put the bottle into the water bath. This will prevent the solution from setting prematurely.

8. When cooled, add the appropriate antibiotic into the solution and swirl to mix.
9. Prepare Petri dishes in a sterile environment (surfaces cleaned with 70% ethanol etc.). Carefully pour a thin layer of solution into the Petri dishes to cover the bottom of the plate (approximately 10 - 20 mL per plate). Try to avoid transferring or creating any bubbles.
10. Leave the plates to set before storing them in the fridge.