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Obtain LB agar plates (with antibiotics)

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We use this protocol and it's working

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Disclaimer

Abstract

LB plate is a fundamental laboratory consumable. This protocol helps make basic LB agar plates.

1 Weigh 40 g LB nutrient agar powder.

Note

If do not have LB nutrient agar powder, use this as an alternative:
25 g LB broth powder and 15 g agar.

2 Dissolve the powder in 1000 mL distilled water.

Note

Agar may not completely dissolve in water at room temperature. Use water bath to help dissolve. Aliquoting the solution into smaller flasks is recommended, because it makes the following autoclaving and plating procedure more convenient.

3 Autoclave the melting LB agar at 121 °C for 00:15:00 . 15m

Safety information

Use the autoclave safely.

4 When autoclaving procedure is finished, wait until the flask cools to around 40 °C , which will not hurt the palm.

Safety information

Be careful with hot steam.

5 (Optional) If the plate is required to contain a certain antibiotic, add a certain amount of antibiotics.
Here ampicillin is used as an example:

Add 1 mL 1000X ampicillin stock solution into 1000 mL melting LB agar. Mix well.

Note

Add antibiotics when melting agar has not solidified.

Note

Different antibiotics may have different stock concentration. The most common concentration is 1000X stock solution. Add antibiotics accordingly.

6 Pour melting agar into empty petri dishes until the melting agar has completely cover the bottom of the petri dishes. Avoid bubbles.

Note

15 mL of melting agar is recommended. Adjust the volume according to the petri dishes used.

Note

If bubbles emerged, use a sterile loop to pop it.

7 Leave the plates to cool and the lids ajar.

8 Wait until all agar plates solidified. Invert the plates and store at 4 °C .

Note

Store temperature should be adjusted according to the antibiotics added.