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Ringer's Solution

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ABSTRACT

Standard protocol for preparing 100mL of Ringer's Solution for mice and rat perfusions.

GUIDELINES

Make sure you bubble for at least 5 minutes before adding calcium chloride to Ringer's solution to prevent precipitation. If precipitation occurs, discard and remake entire solution.

MATERIALS

- 100mL Erlenmeyer flask
- 1000µL Pipette
- Serological Pipettes

SAFETY WARNINGS

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Always wear appropriate PPE.

- 1 1.0 mL (Na₂HPO₄, 18 g/L, at room temperature)
- 2 9.9 mL (NaCl, 79.8 g/L, 4 °C fridge)
- 3 1.0 mL (KCl, 37.5 g/L, 4 °C fridge)
- 4 1.0 mL (MgCl₂• 6H₂O, 20 g/L, 4 °C fridge)
- 5 2.5 mL (NaHCO₃, 50 g/L, 4 °C fridge)
- 6 0.200g of Dextrose
- **7** Bring solution up to 97ml with double distilled water (ddH_2O).
- 8 1.0 ml Lidocaine hydrochloride
- 9 1.0 ml heparin (prevents blood clotting) -bubble 95% air: 5% CO₂ at 35 °C

10 1.0 mL (CaCl₂• 2H₂O, 30 g/L, 4 °C fridge)