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SM buffer

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Protocol status: Working

We use this protocol and it's working

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Abstract

SM buffer is used for diluting and storing bacteriophages.

SM buffer contains:

200 mM NaCl₂

10 mM MgSO₄

50 mM Tris-HCl, pH 7.5

For storage at -20 or -80° C, 15% glycerol can be added before autoclaving.

The buffer can keep at room temperature for several months.

Guidelines

This recipe is for 1 liter of buffer. Make sure to recalculate the measurements if you are making a smaller or larger volume.

Ensure that your MgSO₄ is a monohydrate before weighing. If not, recalculate amount required to reach correct concentration.

Materials

For 1 liter of SM buffer:






11.7 g NaCl₂

1.4 g MgSO₄ (monohydrate)

50 mL Tris-HCl, pH 7.5 (1 M)

950 mL demineralized water



- 1 Weigh off  11.7 g NaCl₂ and  1.4 g MgSO₄ and add to a clean 1L blue cap flask or other autoclave safe container.
- 2 Measure  50 mL Tris-HCl and add to the flask.
- 3 Measure  950 mL demineralized water and add to the flask.
- 4 Screw the cap on tight and mix thoroughly for  00:00:30 . 30s
- 5 Loosen the cap and autoclave.
- 6 If there are still undissolved particles, mix until dissolved. Then let it cool at room temperature.