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SM buffer

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FOOD Micro UCPH

Frej Larsen

SM buffer is used for diluting and storing bacteriophages.

SM buffer contains:
200 mM $NaCl_2$

10 mM $MgSO_4$

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.

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Frej Larsen 2021. SM buffer. **protocols.io**
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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 $MgSO_4$ is a monohydrate before weighing. If not, recalculate amount required to reach correct concentration.

For 1 liter of SM buffer:
11.7 g $NaCl_2$
1.4 g $MgSO_4$ (monohydrate)
50 mL Tris-HCl, pH 7.5 (1 M)
950 mL demineralized water

1 Weigh off **11.7 g** $NaCl_2$ and **1.4 g** $MgSO_4$ 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.

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