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🌐 Phosphate-buffered Saline (PBS)

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Protocol status: Working
 We use this protocol and it's working

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ABSTRACT

This protocol describes how to make 1 L of PBS to a final concentration of 1x or 10x solution. The solution can be made RNase free with the addition of DEPC (diethyl pyrocarbonate) as in step 5.

MATERIALS

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- ⊗ Hydrochloric acid **Sigma Aldrich Catalog #H1758**
- ⊗ Sodium chloride **Sigma Aldrich Catalog #S7653**
- ⊗ Potassium chloride **Sigma Aldrich Catalog #P9333**
- ⊗ Disodium phosphate **Sigma Aldrich Catalog #S7907**
- ⊗ Monopotassium phosphate **Sigma Aldrich Catalog #P9791**
- ⊗ Diethyl pyrocarbonate **Sigma Aldrich Catalog #D5758**

SAFETY WARNINGS

- ⚠ Read appropriate SDS for sodium chloride, potassium chloride, disodium phosphate, monopotassium phosphate, hydrochloric acid and diethyl pyrocarbonate before commencing work.

Sort By Relevance Name ↑ Name ↓ Base Name ↑ Base Name ↓
 Formula Weight ↑ Formula Weight ↓

1 For a final concentration of 1x PBS weigh out the following amount of each reagent: NaCl- 8g, KCl-

0.2 g, Na_2HPO_4 - 1.44 g, KH_2PO_4 - 0.24 g. For a final concentration of 10x PBS weigh out the following amount of each reagent: NaCl- 80g, KCl- 2 g, Na_2HPO_4 - 14.4 g, KH_2PO_4 - 2.4 g.

- 2 Dissolve reagents in 800 mL of triple distilled H_2O using a magnetic stirrer and flea or by manual shaking.
- 3 Using a pH meter, adjust pH of solution to 7.4 (or 7.2 if required) by adding concentrated hydrochloric acid (HCl).
- 4 Add triple distilled H_2O to bring final volume of solution to 1 L
- 5 If require RNase free PBS, add 1 mL of DEPC (diethyl pyrocarbonate) per 1 L of PBS.
- 6 Autoclave.