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Preparation of 0.5L of phosphate buffer (pH=6.0)

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Protocol status: Working

We use this protocol and it's working

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Abstract

Original source of the protocol: WormBook Methods

http://www.wormbook.org/chapters/www_strainmaintain/strainmaintain.html

This protocol is for making pH=6.0 phosphate buffer, which is used in the preparation of worm media, like NGM (Nematode Growth Medium).

Materials

Monopotassium phosphate:

Potassium phosphate monobasic Merck MilliporeSigma (Sigma-Aldrich) Catalog #795488-500G

Dipotassium phosphate:

Potassium phosphate dibasic Merck MilliporeSigma (Sigma-Aldrich) Catalog #P3786-500G

Filter: Rapid-Flow Nalgene 0.2µm aPES membrane, ref: 564-0020

Vaccum pump: Fisher Brand, ref: FB70155

Troubleshooting



- Add $\perp 54.2 \text{ g} \pm 0.5$ of monopotassium phosphate (KH₂PO₄) to a clean 0.5L bottle.
 - ¹Also referred to as potassium phosphate monobasic
- Add \perp 17.8 g ±0.2 of dipotassium phosphate² (K₂HPO₄) to the bottle.
 - ²Also referred to as potassium phosphate dibasic
- Measure 4 500 mL of milliQ water in a measuring cylinder, and add it to the bottle.
- 4 Shake the bottle vigorously until all crystals are dissolved. This can take a few minutes.
- If this is the first time you prepare this solution, you can ensure that the pH is around 6 using pH paper or a pH-meter. We usually have a pH between 5.8 and 6.
- 6 Filter-sterilize.
- Store on shelf.We usually use it without problem for at least a year after preparation.