0.5M EDTA

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Abstract

This is a basic protocol to make a 0.5M EDTA stock solution at pH 8.0. I have mostly copied it from CSHL's recipe.

Citation: Alex Rajewski 0.5M EDTA. **protocols.io**
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Materials

- NaOH by Contributed by users
- ethylenediaminetetraacetic acid dihydrate E5134-100G by Sigma Aldrich

Protocol

Step 1.

Add EDTA powder to an autoclavable, 500mL, screw-top bottle.

AMOUNT
93 g Additional info: EDTA

Step 2.

Add 400mL of DI water and stir with a magnetic stir bar. Note that the EDTA will not go into solution until the pH is adjusted in a later step.

Step 3.

Adjust the pH to 8.0 using NaOH pellets. It will take approximately 10g of pellets to adjust the pH this high. Add the pellets slowly wearing proper eye and skin protection.

AMOUNT
10 g Additional info: NaOH

Step 4.

Transfer the solution to a graduated cylinder, bring to 500mL volume with water, and return the solution to the screw-top bottle. Make sure to remove the stir bar when transferring the solution.

Step 5.

Autoclave the solution and store at room temperature.

Warnings

The dissolution of NaOH pellets is an exothermic reaction, depending on the volumes it may become hot enough to burn/explode. This is unlikely but possible.