

Jul 05, 2022

RNAlater recipe

DOI

<https://dx.doi.org/10.17504/protocols.io.bp2l61w35vqe/v1>

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Protocol Citation: Yin-Tse Huang 2022. RNAlater recipe. protocols.io
<https://dx.doi.org/10.17504/protocols.io.bp2l61w35vqe/v1>

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Protocol status: Working

We use this protocol and it's working

Created: July 05, 2022

Last Modified: September 13, 2023

Protocol Integer ID: 65948

Abstract

RNAlater recipe



Before you start

1d

- 1 Submerge all your equipment and glassware in **1% bleach to get rid of nuclease**

Reagents

1d

2 DEPC treated water

1d

1. Add  1 mL DEPC in  1 L ddH₂O ( 0.1 % (v/v)); **MIX it well.**
2. Let it sit for  24:00:00 at  25 °C
3. Autoclave it to deactivate DEPC
4. Store the DEPC treated water at  4 °C

3 0.5 M Disodium dihydrate EDTA:

1. Add  18.61 g disodium dihydrate EDTA in  100 mL ddH₂O
2. Adjust pH to 8.0 with NaOH while stiring

4 1 M tri-Sodium Citrate Dihydrate:

Add  29.4 g tri-Sodium Citrate Dihydrate in  100 mL ddH₂O, stir to dissolve

5 1 M sulfuric acid:

Add  5.33 mL sulfuric acid in  100 mL ddH₂O, stir to dissolve

Start to make RNAlater

6 Make a mixture of:

 40 mL of **0.5 M EDTA** +  25 mL **1 M tri-Sodium Citrate** +  700 g **Ammonium Sulfate** +  935 mL **ddH₂O**; stir on a hot plate with low heat until ammonium sulfate dissolved

7 Allow it to cool; adjust the pH of the solution to **pH 5.2** using **1 M sulfuric acid**

Note

To avoid contamination from the immersed pH meter, adjust pH by pouring 10% of the solution in a new beaker and add base or acid to hit the right pH; then scale it up to the needed amount for the original solution and blindly adjust its pH



- 8 The final concentration: 25 mM Sodium Citrate, 10 mM EDTA, 70 g ammonium sulfate in 100 ml ddH₂O; pH 5.2.
- 9 Transfer to screw top, **nuclease-free** bottles; label the date of make; store at  4 °C