VERSION 1

FEB 11, 2020

OPEN ACCESS

DOI:
dx.doi.org/10.17504/protocols.io.bcfpitmn

Protocol Citation: Institute of Medical Biotechnology 2020. 3.7% Paraformaldehyde solution. **protocols.io** <https://dx.doi.org/10.17504/protocols.io.bcfpitmn>

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

Created: Feb 11, 2020

Last Modified: Feb 11, 2020

PROTOCOL integer ID:
 32975

Keywords: PFA, paraformaldehyde, tissue fixative, tissue fixation , fixation

3.7% Paraformaldehyde solution V.1

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Optical Clearing of Tissue

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ABSTRACT

Protocol for preparing a 3.7% Paraformaldehyde (PFA) solution. 3.7% PFA solution can be used to fix tissues.

MATERIALS

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☒ Paraformaldehyde powder **Contributed by users**

☒ DPBS **Contributed by users**

☒ NaOH **Contributed by users**

☒ HCl **Contributed by users**

Equipment:

- Hot plate with a magnetic stirrer
- Thermometer
- Glassware

SAFETY WARNINGS

⚠ Formaldehyde is toxic. Please refer to the SDS (Safety Data Sheet) for detailed safety warnings and hazard information.

BEFORE START INSTRUCTIONS

Safety information

Formaldehyde is toxic. Please be sure to work under a ventilated fume hood and wear gloves and safety glasses.

- 1 For 1 L 3.7% Formaldehyde, add 800 mL 1X DPBS to a glass beaker on a stir plate.

Safety information

Be sure to work under a ventilated fume hood.

- 2 Heat while stirring to approximately 55 °C.

- 3 Add 37 g paraformaldehyde powder to the heated DPBS solution.

- 4 Keep stirring until all PFA powder is dissolved.

Note

Take care that the solution does not boil to prevent formic acid formation.

Note

For better dissolubility of PFA, you can add NaOH -- one drop at the time.

- 5 Once all PFA powder is dissolved, adjust the pH to 7.4 using HCl.

- 6 Add DPBS subsequently until the total volume of 1 L is reached.

7 Transfer the solution into tubes of the desired proportions and store at -20 °C until use.