

Dec 11, 2024

Version 2

Care and Cleaning of OGI BioReactor pH Probes V.2

DOI

<https://dx.doi.org/10.17504/protocols.io.j8nlkoz31v5r/v2>

Francesca Galdi¹

¹OGI Bio

OGI Bio



Jack Hocking

OGI Bio

Create & collaborate more with a free account

Edit and publish protocols, collaborate in communities, share insights through comments, and track progress with run records.

Create free account

OPEN  ACCESS



DOI: <https://dx.doi.org/10.17504/protocols.io.j8nlkoz31v5r/v2>

Protocol Citation: Francesca Galdi 2024. Care and Cleaning of OGI BioReactor pH Probes. **protocols.io**
<https://dx.doi.org/10.17504/protocols.io.j8nlkoz31v5r/v2> Version created by **Jack Hocking**

License: This is an open access protocol distributed under the terms of the **[Creative Commons Attribution License](#)**, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Protocol status: Working

We use this protocol and it's working

Created: August 08, 2024

Last Modified: December 11, 2024

Protocol Integer ID: 104973

Keywords: pH Probe, OGI Bio, Cleaning, cleaning of ogi bioreactor ph probe, ogi bioreactor ph module probe, ogi bioreactor ph probe, protocol for the care, cleaning, ph

Disclaimer

The cleaning protocols provided by OGI Bio are intended as general guidelines for the maintenance of our micro bioreactor equipment. These protocols are designed to ensure optimal performance and longevity of the equipment under standard operating conditions.

OGI Bio assumes no liability for any damage, contamination, or malfunctions resulting from deviations from these protocols, improper use, or the use of incompatible cleaning agents or methods. It is the responsibility of the user to verify that all cleaning agents and procedures are compatible with local regulations, organizational standards, and the materials of the equipment in use.

Abstract

This is the protocol for the care and cleaning of your OGI BioReactor pH Module Probes.

Guidelines

The probes should be cleaned immediately after an experiment to prevent contamination.

The protocol steps should be carried out in quick succession to prevent the probe tip from drying out.

pH probes should always be stored wet, with the tip soaked in electrode storage solution.

Materials

70% ethanol.

Ultrapure (18 MOhm) water.

"Electrode Storage Solution" - 3M Potassium Chloride (<https://www.sentek.co.uk/product/electrode-storage-solution-150ml/>, other suppliers are available)

Equipment	
pH Probe	NAME
Accessory	TYPE
Sentek	BRAND
P600002	SKU
www.ogibio.co.uk	LINK

Safety warnings

-  Do not touch the electrode glass bulb with fingers or other oily or abrasive objects.
DO NOT clean the electrodes by rubbing with a paper towel or cloth as this may build charge and interfere with the pH measurements.

Before start

Ensure sterile conditions are maintained all through the protocol.

Ensure you have familiarised yourself with the guidelines and warnings for this protocol.

Prior to Running an Experiment

- 1 Unwrap the parafilm and remove the storage sleeve from the probe.
- 2 Visually inspect the probe for trapped air bubbles within the electrolyte solution. If bubbles are present, shake probe in a downward motion to remove them.
- 3 Rinse the storage sleeve with ultrapure water and shake to remove any residues of water.
- 4 Rinse the probe by spraying ultrapure water on the thicker portion and allowing it to run down the lower shaft.
- 5 Repeat Step 4 with 70% ethanol.
- 6 Gently dab dry the probe with a paper towel.
- 7 Insert the pH probe through the flask bung.
- 8 Spray the lower protruding glass portion of the probe with 70% ethanol.
- 9 Fill the storage sleeve with 70% ethanol.
- 10 Pinch the top of the sleeve to temporarily deform it, such that air cannot be trapped inside the sleeve when it is slid onto the electrode's tip.
- 11 Slide the deformed sleeve onto the electrode's tip and remove after 1 minute.
- 12 Rinse the sleeve with ultrapure water and set aside to dry.



- 13 Rinse the lower portion of the pH probe with ultrapure water. It is now ready for an experiment.

After an Experiment

- 14 Remove the probe from the bung.
- 15 Spray ultrapure water on the thicker portion and allowing it to run down the lower shaft. Perform this and other washes over a designated waste bottle.
- 16 Repeat Step 15 with 70% ethanol.
- 17 Rinse the storage sleeve with ultrapure water and shake to remove excess liquid.
- 18 Repeat Steps 9 through 11.
- 19 Repeat Steps 15 and 17.
- 20 Gently dab the probe dry with a paper towel.
- 21 Pipette 100 μ L of electrode storage solution into the sleeve.
- 22 Pinching the top of the sleeve as in Step 10, slide the sleeve over the end of the pH probe.
- 23 Dab away any excess fluid with a paper towel.
- 24 Wrap the sleeve with parafilm such that the film secures the end of the sleeve to the glass of the probe. Store upright to prevent the formation of bubbles within the electrolyte solution.