

Protocol for Cleaning and Calibrating Incubator

Cleaning Incubator:

1. Autoclave new incubator parts an hour prior to cleaning: shelves (2-4), shelf channels (4-8), and side panels (2)
2. Clear all cell flasks and tube from incubator
3. Turn the incubator off
4. Take out all old parts from incubator: shelves (2-4), shelf channels (4-8), and side panels (2)
5. Take apart the top covering
6. Wipe all sides of the incubator with **Lysol** (top, sides, back, bottom, both sides of glass door panels, around the top filter, and behind the rear plug)
7. Wipe again with 70% Ethanol
8. Orange rear plug is to be soaped in bleach and rinsed with 70% Ethanol
9. Unwrap autoclaved incubator parts and spray down with 70% Ethanol before placing them in the incubator
10. Wash and autoclave old incubator parts

Cleaning Incubator parts:

1. Spray with fungicide and scrub surface of incubator parts.
2. Rinse with tap water
3. Spray with 70% Ethanol and wipe dry
4. Wrap in blue autoclave cloth and seal with autoclave tape
5. Autoclave at 121°C for 30 minutes
6. Store in Tissue Culture room (optional)

Calibrating Incubators:

1. Clear all cell flask and tubes from incubator
2. Press Mode button to reach “set” mode
3. Press the → button to CO₂ level
4. Press the down arrow button to dial the level to 0 and press enter
5. Press Mode button to switch back to “run” mode
6. Open both outer and inner doors of incubator to let out all the CO₂ inside for about 30 seconds
7. Close the incubator doors and kept shut overnight.
8. Check the CO₂ level with the fyrite gas analyzer to make sure it is at 0
9. Press the Mode button to reach “cal” mode
10. Press the → button to CO₂ Zero
11. Press the up and down arrow to adjust reading to 0 and press enter

12. Press the Mode button to reach “set” mode
13. Set the CO₂ level to the % you want to keep your incubator at and press enter
14. Press the Mode button back to “run” mode
15. Shut incubators for 2 more hours and check CO₂ level with fyrite gas analyzer again, but this time record the exact reading from the analyzer and input that as CO₂ span in (“cal” mode/ CO₂ span reading)

Using the Fyrite

1. Zero the fyrite by first pressing the top opening to allow gas exchange, then set the fyrite upright for the red solution to settle. Next adjust the sliding ruler to line up the 0 with the meniscus.
2. Locate the gas sampling port on the incubator
3. Attach one end of the fyrite tube to the sampling port and the other end to the fyrite
4. Squeeze the bulb 18 to 20 to pump the gas into the fyrite
5. Detach the tube from both ends
6. Mix the gas with the solution in the fyrite by inverting it a couple times
7. Place the fyrite upright to settle the solution and take reading
8. Press the top opening to reset fyrite