



WILDERLAB®



SC600 PERISTALTIC PUMP & PUMP KIT

SAMPLING INSTRUCTIONS

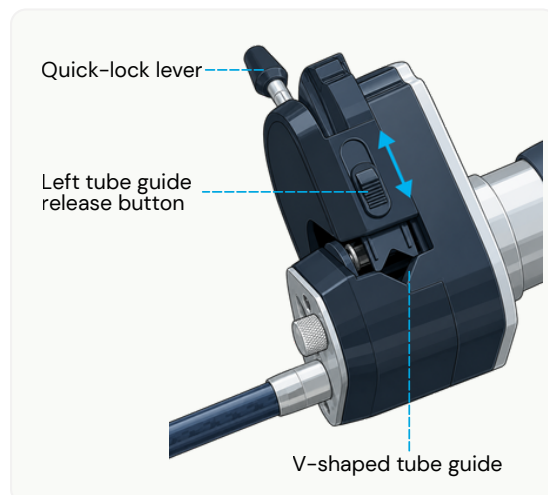
SC600 Peristaltic Pump & Pump Kit

Materials needed

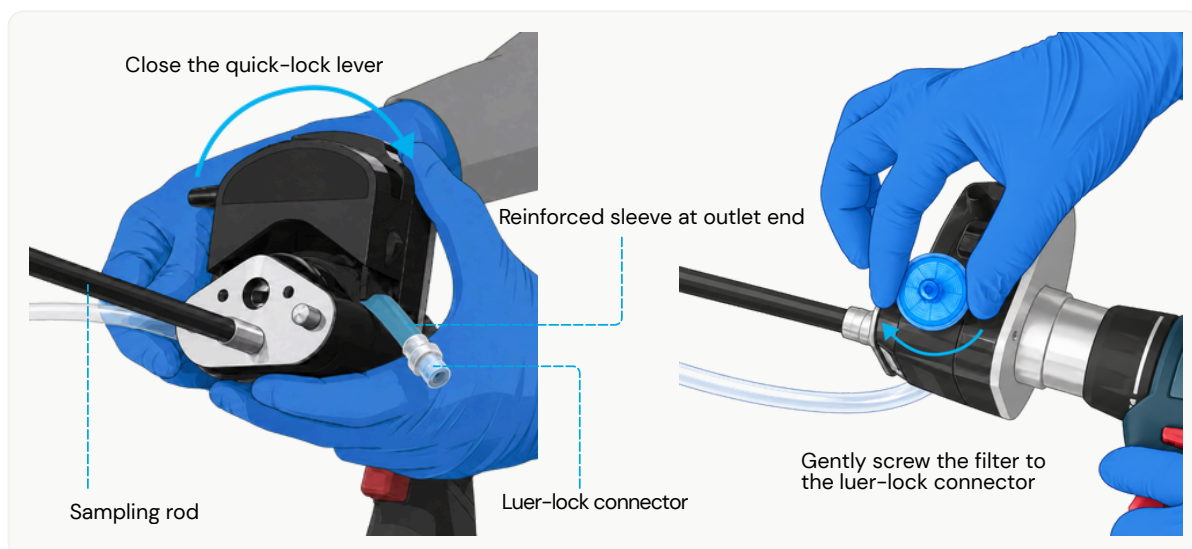
- SC600 Peristaltic Pump + Wilderlab eDNA Pump Kit
- 1–2 L graduated measuring jug
- Spray bottle with 10% bleach or bleach wipes
- Optional: extender rod and XL adaptor

Setting up the pump

- 01 Assemble the sampling rod and attach it by screwing into the Peristaltic Pump.
- 02 Open the eDNA Pump Kit, put on the gloves, and take out the envelope containing the peristaltic pump tube.

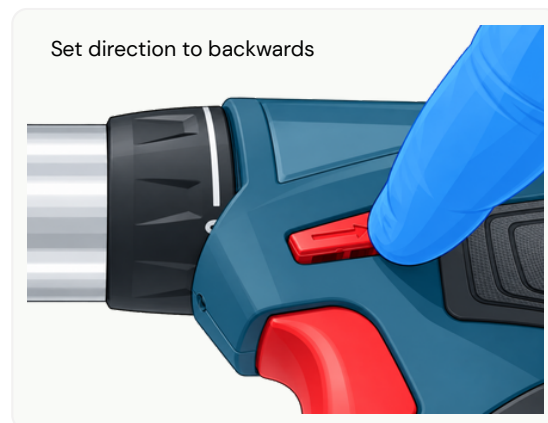
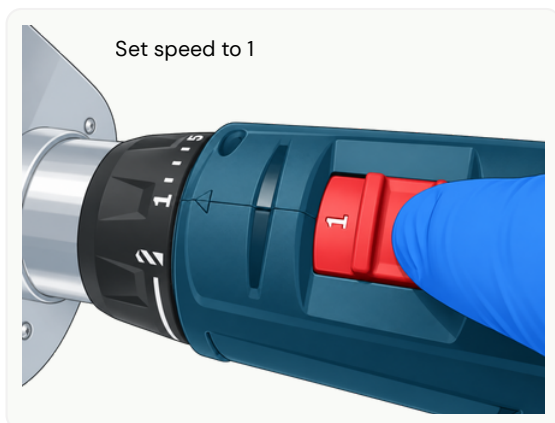


- 03 Attach the intake end (with prefilter) of the tube to the hose clip at the tip of the sampling rod
- 04 Open the pump head by moving the quick-lock lever fully to open position.
- 05 Using your thumb and forefinger, open the V-shaped hose guides using the left and right buttons. With your other hand, thread the outlet end of the tube through the pump head. Release the hose guides to hold the tube in place.



- 06 Gently pull the tube through until around half of the tubing reinforcement sleeve is visible. Align the marker line with the V-shaped hose guide.
- 07 Close and lock the pump head by moving the quick-lock lever fully into the lock position.

- 08 Attach the eDNA filter by gently screwing it to the luer-lock connector on the outlet side of the pump head.
- 09 Ensure that the drill speed is in the #1 position and the drill direction is set by depressing the backwards arrow switch.



Filtering your sample

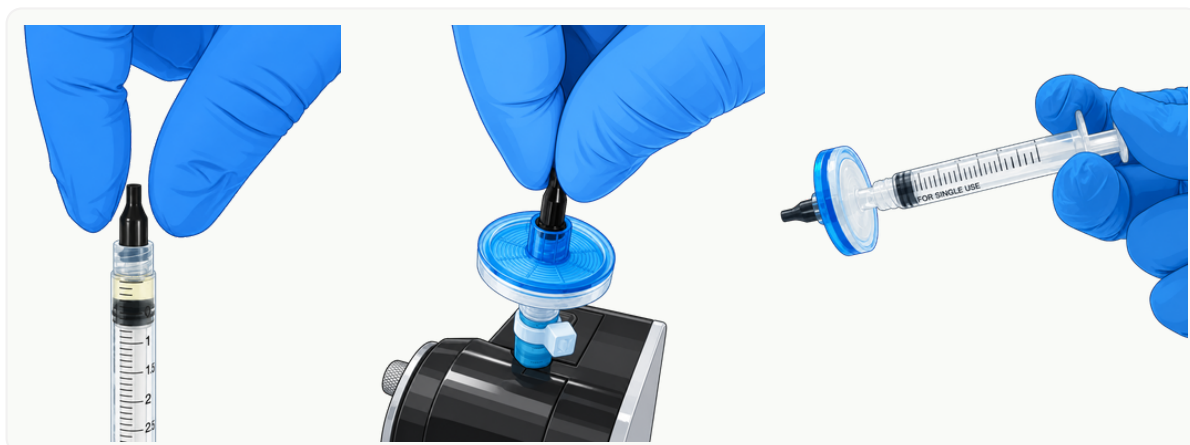
- 10 Place the graduated measuring jug beneath the filter outlet (or have a second person hold it) and immerse the intake end of the tube in the water sample.
- 11 Squeeze the trigger and pump until:
 - the target sample volume has been filtered; or
 - the filter becomes clogged and water no longer flows through the filter. (Do not operate for prolonged periods with a clogged filter. This prevents effective air purging)



Clearing the line and preserving your sample

- 12 **IMPORTANT:** Remove the intake end from the water. Hold the pump horizontally with the eDNA filter pointing downward. Continue pumping until air has passed through the filter and residual water has been expelled.

- 13 Take the small syringe from the kit and remove the black cap from the tip of the small syringe.
- 14 Screw the black cap on to the eDNA filter.



- 15 Unscrew the filter from the tubing and screw it on to the end of the small syringe.
- 16 Inject the preservative into the filter using the small syringe, and holding the plunger in, gently shake the filter for approximately 3 seconds to distribute the preservative.
- 17 If you are taking additional replicates, attach a new filter to the pump outlet and repeat steps 10 –16. There is no need to replace the tubing between replicates.



DO NOT submerge pump in water. If pumping in rough waters, sterilize a bucket with 10% bleach solution, rinse with sterile water, and take the water sample from the bucket.

Gently wipe pump with freshwater after sampling in marine environments and use WD40 on drill parts if needed.

- 18 Place the filter, with the syringe and black cap still attached, into the sample bag and seal the bag. Record the relevant metadata on the back of the sample bag. (Google maps provides latitude/longitude location information).
- 19 If the sampling rod touched the water during the sampling process, it should be sterilized. Spray or wipe down with 10% bleach solution and allow 10 minutes contact time before rinsing with clean tap water.
- 20 Stow the pump and sampling rod in the dedicated carry case.

Sample metadata submission

Submit your sample metadata online at wilderlab.co/submit-samples

Print and sign the Chain of Custody (CoC) form that will be emailed to you after online metadata submission. Include this in the parcel containing your samples (no refrigeration necessary).

Send your samples back to us within one month from collection. If this isn't possible, ensure that your samples are stored in a freezer at -20 °C until they can be sent. Send your samples and CoC form to the address provided in the confirmation email.

Important notes



- Ensure all batteries are fully charged before commencing fieldwork.
- For correct operation:
 - Ensure the red direction button with reverse arrow is depressed.
 - Ensure the red speed selector on top of the drill unit is set to Speed 1.
- A single peristaltic tube may be used for multiple replicate samples collected from the same site.
- The velcro strap included in your case can be secured around the pump trigger for hands-free pumping.
- Do not reuse tubing between different sites. We do not recommend sterilising and reusing tubing due to the risk of cross-contamination.
- The pump is not waterproof. Water entering the peristaltic pump head or power drill base will cause corrosion and void the warranty.
- To avoid splashing and corrosion when sampling in rough conditions, we recommend collecting water in a sterile bucket and filtering directly from that container
- If traveling by air with the pump, we strongly recommend checking the airline's baggage requirements for transporting battery powered equipment.

Recommended filtration volumes

The optimal filtration volume depends on water clarity and the objectives of your study. As a general guide:

Environment	Recommended Volume (L)
Turbid freshwater and estuarine	1 – 2
Clear freshwater and coastal marine	2 – 5
Groundwater and offshore marine	10 – 50



These volumes are recommendations only. If the filter becomes clogged before the target volume is reached, record the final volume filtered and retain the sample. Clogged filters contain ample biological material and consistently provide excellent eDNA results.