



Equipment

For sampling the following equipment is recommended to have available:

- Barcode tubes with RNA-later from PHARMAQ Analytiq
- Anesthetic
- Envelope/box for shipping
- Tweezers, scalpel and/or surgical scissors
- Clean surface
- Paper for cleaning
- Requisition form and barcode form (included in the sampling kit)
- Weight scale
- Length measurer

“ “ *If the samples are to be used for gill pathogen analysis as well, it is required that sterile technique is used when the fish is sampled. This is to avoid cross-contamination of the samples.*

Procedure

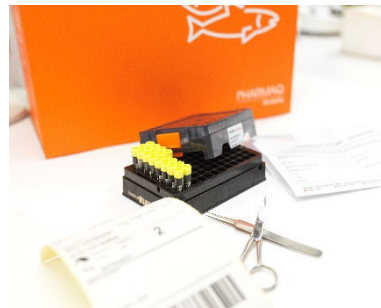
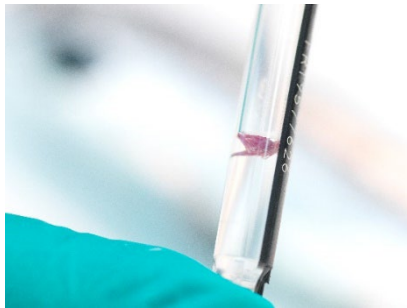
1. Euthanize the fish
2. Write down weight, length and smolt index for the individual you are sampling. Write down any deformities or signs of disease in the comment section.
3. Find the 2nd gill arch and use the tweezers to hold the cartilage.
4. Cut out the whole gill arch.
5. Place the gill arch on a clean surface.
6. Cut out a piece of gill tissue (2x2x2mm) from the bend in the gill arch (no cartilage). Make 2 pieces.
7. Put the tissue samples in the sampling tube with RNA-later. Both pieces must be covered by the fluid in the sampling tube.
8. Fill out the requisition form with relevant production information (temperature, salinity, salt feed, light regime etc.)



9. Samples are stored in the refrigerator for 24 hours before freezing, or they can be sent without freezing if they are to be analyzed right away.
10. Place the samples in an envelope/box together with the requisition form and barcode form, and send with express delivery to:

Norway: PHARMAQ Analytiq, Thormøhlens gate 53D, 5006 Bergen, NORWAY.

UK: PHARMAQ Analytiq, An Lòchran, 10 Inverness Campus, Inverness, IV2 5NA, Inverness, Scotland



Recommended sampling regime

3 samplings per fish group with 20 fish in each sampling:

- **Sampling 1:** Before any stimuli is given, and before the smoltification process starts
- **Sampling 2:** Between 1st and 3rd sampling
- **Sampling 3:** Approx. one week before seawater transfer

NB! If using a salt / smoltification feed, the last sampling must be done before starving of the fish. Please make a note if the fish have feed in bowel.