metaprobe eDNA extraction

Protocol for extracting eDNA from Metaprobe 2.0 samples

Developed based on Maiello et al. Little samplers, big fleet: eDNA metabarcoding from commercial trawlers enhances ocean monitoring 2022. *Fisheries Research*. [doi.org/10.1016/j.fishres.2022.106259]

One Metaprobe 2.0 sample consists of 3 cotton-gauze rolls suspended in 98% ethanol in 50mL centrifuge tubes. The following protocol is for laboratory based extraction of eDNA from rolls of cotton-gauze from one sample. **Updated following correspondence from Guilia Maiello**.

1. Put gloves one. Blot gauze rolls prior to extraction with dry paper roll.
2. To prepare rolls of gauze samples, cut small pieces (~ 2x2 cm) from each roll of gauze in a Petri dish. Try to take small pieces of gauze from different part of the roll in order to have pieces from different sections of the roll of gauze. Change scissors between rolls of gauze, and clean scissors between Metaprobe samples with a Ethanol-Bleach-Ethanol sequential cleaning.
3. Incubate the cut samples in 540uL of extraction buffer and 60uL of proteinase K (20ug/mL).
4. Then follow extraction as per the Sterivex protocol: [https://github.com/MollyKressler/CornishBlue-eDNA-Molecular-Lab-Protocols/blob/main/sterivex-dneasy-extraction.md]