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Inductively coupled plasma mass spectrometry (ICP-MS)

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Protocol status: In development

We are still developing and optimizing this protocol

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Abstract

Inductively coupled plasma mass spectrometry (ICP-MS) can be used to detect metal elements existing in samples. Because we are not capable of conducting ICP-MS on our own, we must seek help from our advisors. This protocol is a general description of our actions.



- 1 Filter all samples to be tested using 0.22µm syringe filters.

Note

Samples are obtained by microwave digestion.

Protocol

NAME

Microwave digestion for microbes

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Preview

Keep at least 2mL samples after filtration.

- 2 (Optional) Dilute the samples to 0-20ppb using nitric acid (2%) if it contains too much desired elements more than the measuring range of equipment.
- 3 Asking an assistant for help in conducting ICP-MS. Obtain a standardized curve before starting to measure the samples.