

UMGC's Nucleic Acid Extraction Sample Submission Guidelines

1. Submitting Samples:

- a. When submitting samples for extraction, we recommend roughly:

~50–100 mg of plant tissue in 2 ml tubes with sample duplicates (triplicates is even better).
Either lyophilized (preferred) or fresh-frozen tissue is acceptable.

~40 mg of human or animal tissue

~ 1×10^6 cells. We have tried fewer cells in the past with mixed results (and never gotten acceptable results below 3,000).

~5-6 10 μ M sections from FFPE blocks.

These are suggested amounts, we can extract other smaller and larger amounts.

2. DNA Extractions:

- a. Please fill out the sample submission form carefully.

- a. Standard processing for fecal samples for 16s is to remove extra liquid. If you want liquid material included in the extraction, please notify staff at the e-mail below.

3. RNA Extractions:

- a. Samples sent for RNA extraction should be preserved using RNAlater, a similar product, or flash frozen.

NOTE: Waxy plant tissue can sometimes resist penetration by RNAlater.

Samples should be shipped on dry ice, and we consider it best practice to ship early in the week. Samples are retained at -80 until we are ready to extract.

4. Quality control Required for all submissions:

Nanodrop and Picogreen for DNA.

Nanodrop and Ribogreen (usually with Sizing) for RNA.

5. Include a hard copy of the Submission Form with plate.

6. Send Submission Form electronically to extract@umn.edu. Please follow instructions on form carefully.

7. Please give advance notice of submission date and time so staff can receive samples. Preferably at LEAST 24 hours. Ship to the following address:

ATTN: Extraction Services

University of Minnesota

1-202 Nils Hasselmo Hall

312 Church Street SE

Minneapolis, MN 55455

612-624-3177

Incorrect submissions will delay your project.